# BUREAU OF MUNICIPAL AFFAIRS

# REPORT RE HOUSING

# FOR 1919

**INCLUDING** 

REPORTS OF OFFICIALS, STATEMENTS
AS TO OPERATIONS OF HOUSING
COMMISSIONS, PLANS, Etc.

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



To His Honour, LIONEL HERBERT CLARKE,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I herewith beg to present for your consideration the Report Re Housing of the Bureau of Municipal Affairs, for 1919, which includes Reports of Officials, Statements as to Operations of Housing Commissions, Plans, etc.

Respectfully submitted,

H. C. NIXON,

Provincial Secretary.

To the Honourable H. C. NIXON,

Provincial Secretary of the Province of Ontario.

SIR,—I have the honour to submit for your approval the Report Re Housing of the Bureau of Municipal Affairs, for 1919, which includes Reports of Officials, Statements as to Operations of Housing Commissions, Plans, etc.

I have the honour to be, Sir,

Your obedient servant,

J. A. Ellis,

Director of the Bureau of Municipal Affairs.

# REPORT OF DIRECTOR

This Report deals with the work which has been done under "The Ontario Housing Act, 1919," in the year 1919, and contains suggestions regarding the work to be done in future under the Act.

# Organization of Housing Department:

The Act referred to was assented to on the 20th of March, 1919. The administration of it was placed under the direction of the Director of the Bureau of Municipal Affairs. The Housing Branch of that Bureau was then organized.

It was necessary for each Municipality coming under the provisions of the Act to appoint a Housing Commission and to organize its own local staff. Through its various officials the Housing Department has supplied a large amount of information, and given considerable assistance to the various Housing Commissions.

The organization of the Housing Department and of these Housing Commissions necessarily occupied considerable time. It was therefore not until August, 1919, that the actual construction of houses under the Housing Act can really be said to have commenced. Considering this, the results obtained in 1919, are, I think, most satisfactory.

# The officials of the Housing Department are:

Secretary.—J. J. Hoolihan, (Pte.)

Accountant and Travelling Auditor.—S. F. Kitto, (Lieut.)

Chief Architect.—Jas. Govan.

Assistant Architect.—G. N. Williams.

Town Planners—W. E. Harries and A. V. Hall.

Sanitary Engineer.—R. O. Wynne-Roberts.

Travelling Building Inspectors.—J. F. Pratt, (Capt.); J. C. Fletcher, (Capt.) and E. W. Hamnett, (Sgt.).

Architectural Draughtsmen in Chief Architect's office.—Albert Oldfield, (Pte.); C. H. Buck, (Sgt.-Major); T. P. Bellinger, (Pte.); and J. P. Sharp, (Pte.).

Stenographers.—Miss Frances E. Fullerton and Miss Alyda Becker.

The work done by all these officials has been most satisfactory. Those in charge of the various sub-branches have supervised in an efficient manner the work coming under their respective charges. In addition to seeing that the Department's various requirements were carried out, these officials have at all times given advice and suggestions to the various Housing Commissions. Whilst there has been a constant endeavour to see that the Department's requirements were complied with, the policy has also been to endeavour to get the various Housing Commissions, of their own accord, through suggestions and advice, to carry on their work in such a way as to get the very best possible results.

# Cost of Houses:

The Act fixed certain limitations as to the cost of the houses to be erected under it. Since it was passed, the cost of construction has steadily increased until it is now, taking an average all over the province, at least 25 per cent. greater than it was in March, 1919. This has added to the difficulty of obtaining the most desirable results under the Act.

The cost of constructing houses is now, taking an average all over the province, about 125 per cent. greater than it was before the war. In Great Britain the increase is nearly 300 per cent. Lumber has so greatly increased in price here that we have arrived at the stage where the cost of erection of a house of solid brick is not a great deal in excess of one of frame construction. As to the advisability of building a house of solid construction rather than of frame, from the point of view of durability and saving in maintenance, there never was any doubt. Considering these matters, I recommend the erection of houses of solid construction, especially where the comparatively small additional increase in the monthly payments over those of frame construction can readily be met by the person requiring the house.

#### Shortage of Houses:

During the war very few small houses were constructed. In consequence, at the close of the war, there was a great shortage of such houses in nearly all the urban centres of population. My estimate of such shortage is at least 20,000. Since the end of the war there has been a considerable expansion of industrial activity all over the province. This has accentuated the difficulty of dealing with the problem of the shortage of small houses.

## Housing Commissions:

There are now ninety-nine municipalities which have passed By-laws under the provisions of the Act, and appointed Housing Commissions. Of these, 19 are cities, 49 towns, 17 villages, and 14 townships. Sixty-eight municipalities have constructed houses. All these contemplate construction on a much larger scale in 1920. In addition, all municipalities, with two exceptions, which have not yet constructed houses, intend to do so in 1920.

It is to be noted that the City of Toronto did not adopt the provisions of "The Ontario Housing Act" but appointed a Housing Commission of its own. This Commission has constructed a number of houses, the financing of which has been done by the city itself.

# Housing Companies:

The following companies have become incorporated under "The Housing Accommodation Act" (R.S.O., 1914, Chapter 220) for the purpose of erecting houses under "The Ontario Housing Act, 1919.":

Hawkesbury.—The Riordon Annex Housing Co., Ltd. Hamilton.—The Wentworth Construction Housing Co., Ltd. Fergus.—The Fergus Housing Co., Ltd. Iroquois Falls.—The Iroquois Falls Housing Co., Ltd.

Listowel.—The Listowel Housing Co., Ltd.

Kitchener and Waterloo.—The Dominion Rubber System Housing Co., Waterloo, Ltd.

Kitchener.—The Waterloo County Housing Co., Ltd.

The Riordon Annex Housing Co., Ltd., the Fergus Housing Co., Ltd., the Iroquois Falls Housing Co., Ltd., and the Listowel Housing Co., Ltd., have constructed houses under "The Ontario Housing Act, 1919," but the other companies have not yet done so.

# $. 1 \, ppropriations:$

The Dominion Government appropriated \$25,000,000 to be loaned, pro rata to population, to the various provinces for Housing purposes. This was to be loaned at 5 per cent. and the provinces were to re-loan it at the same rate. The Province of Ontario's share of the \$25,000,000 is \$8,753,291.93. To this the province agreed, in an informal way, to add \$2,000,000.

The total amount appropriated to municipalities by the province by Order-in-Council in 1919 was \$10,629,000. Of this, \$5,125,000 was appropriated to seventeen cities; \$3,649,000 was appropriated to thirty-nine towns; \$735,000 was appropriated to sixteen villages; and \$1,120,000 was appropriated to eleven townships.

No appropriations have yet been made to two cities, ten towns, one village, and one township, because these municipalities came under the provisions of the Act within a comparatively recent period. Two townships have not asked for appropriations.

If all the requirements of the various municipalities for 1920 are met, about \$8,000,000 more will have to be appropriated in addition to the \$10,629,000 already appropriated. A large number of municipalities which have constructed a small number of houses this year, are contemplating large developments in 1920, in addition to those constructed in 1919, if appropriations are made sufficient to cover these.

#### Loans:

The total loans approved for houses erected in 1919, is \$3,677,974. Of this, \$1,771,746 was to be loaned to seventeen cities, \$1,311,897 to thirty-one towns, \$286,905 to thirteen villages, and \$307,426 to seven townships. Loans amounting to \$941,640 have also been approved for houses which are not yet erected.

#### Paid on Loans:

The total amount actually paid by the Province on account of such loans and the purchase of land for Housing purposes in 1919, is \$2,807,721.87. Of this, \$1,426,568.60 was paid to sixteen cities; \$1,007,826.17 to thirty towns; \$208,929.80 to thirteen villages and \$164,397.30 to seven townships.

#### Houses Erected:

A summary of the houses erected in 1919 is as follows:

No. of Houses		Loans	;	Average L per hous	
14 3 43 26 23 44 237 88 230 332 13 27 23 81	Four roomed, frame clapboard fin'sh solid brick, hollow tile or concrete.  Five roomed, frame clapboard finish frame stucco finish brick veneer solid brick, hollow tile, or concrete  S ix roomed frame clapboard finish frame stucco finish brick veneer solid brick, hollow tile, or concrete.  Over six rooms, frame clapboard finish frame stucco finish brick veneer solid brick, hollow tile or concrete.	27,700 7,575 115,489 77,050 67,270 124,630 662,299 257,274 678,2°8 1,185,000	00 00 00 00 00 00 00 00 00 00 00	\$ 1,978 2,525 2,685 2,963 2,924 2,832 2,794 2,923 2,948 3,569 2,854 3,000 2,464 3,712	00 79 46 78 50 09 57 82 28 61 00 13
1,184		3,677,974	00	3,106	40

Of the above, 1,060 are detached houses and 124 are semi-detached.

Most of these houses are now occupied.

In addition to the above, 269 applications for loans, aggregating \$941,640 have been approved for houses which are not yet erected.

It will be seen that 62 per cent. of the houses erected are either of brick veneer or of solid construction.

The average loan per house indicates that there is a reasonable margin of security in the loans made. About two-thirds of the houses have been erected by persons who own their own lots. Such persons can obtain loans for the full cost of the house, but in a large number of cases the loans have been made for less than such full cost. Where houses are built under this plan, persons building them can make their own contracts for construction. Working men can also do part of the construction work themselves, and this has been done in many cases. The Department has encouraged this method. Persons wanting houses have each obtained the particular kind of house which they desired, subject to the minimum requirements of the Department. There has been no effort to force upon people any particular kind or kinds of houses. These methods are largely responsible for the success which has so far been obtained under The Ontario Housing Act.

#### Plans:

When the work in connection with the administration of the Act was commenced, it was found that not sufficient attention was, as a rule, given to the planning of small houses, and that many contractors built houses which were not as well constructed as they should have been. The Department, through its various officials, has endeavoured, with a remarkable degree of success, to get an improvement in the erection of houses of this class.

Special attention has been given to the planning of the houses from the point of view of having no space wasted in unnecessary halls or passages. It has been the endeavour to have every inch of space in the house made available for living purposes. The houses have been planned so as to secure the maximum of accommodation at the minimum of expense. They have also been planned so as to give

as little labour as possible in connection with the care of them. The housewife has been saved all possible unnecessary going up and down stairs and travelling from one room to another, and the kitchen has been arranged so as to give her the minimum of labour there.

Before the Housing Act was passed, there appears to have been a general impression that it was unnecessary to carefully plan small houses. This frequently resulted in more money being expended than was required for the living accommodation which was actually secured.

Contained in this report are a number of plans of houses, nearly all of which have been actually constructed under the Act. The cost of construction is given in each case where the house has been built. It is expected that these plans and statements of cost will prove of considerable assistance in the work which will be done hereafter.

Plans lettered A and B are stock plans of the Department. The prices given for construction from these plans are estimates, and include hot air heating, plumbing, electric wiring, supervision, etc.

Houses have not yet been built from the plans lettered M and B 1.

The prices given for construction from these plans are therefore estimates, and include hot air heating, plumbing, electric wiring, supervision, etc.

Plans lettered C, D, E, F, G, H, J, K, L, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, A1, C1, D1, E1, F1, G1, H1, J1, K1, L1, M1, N1, O1, and P1. are for houses which have been erected and the actual cost ascertained. The price given in each case includes hot air heating, plumbing, bath room equipment, supervision, and all other charges necessary for a complete house. It is to be noted however, that the cost of construction has increased even since some of these houses were erected.

In nearly every municipality where houses have been erected the monthly payments for principal and interest, including taxes and insurance, are less than the rentals for similar houses in the same municipalities.

# Inspection:

Each Housing Commission was asked to appoint a Building Inspector to supervise the construction of all houses erected under the Act, and nearly all the Commissions did so. In addition, the Department has employed Building Inspectors who have made periodic inspections of such houses. As a result, there is no question that the construction of the houses is generally very good and an improvement upon what had formerly been done.

#### Water, Sewerage, etc.:

It has been insisted upon that every house should be supplied with water, and that where there were sewers all sanitary conveniences should be installed. Where there were no sewers, septic tanks or approved sanitary closets have been allowed. In all cases roughing in for all sanitary conveniences has been insisted upon, so that when sewers or septic tanks could be constructed the sanitary conveniences could be easily and economically installed. With regard to sanitary conveniences, the laying out of the land, the location of the house on the lot, and the general arrangement and appearance of the house, the rule of the Department has been that the best that could be done in any particular locality should be done.

Lots:

A great deal of attention has been paid to the exact location of the house on the lot. Block plans have been insisted upon so that the best advice possible could be given as to the erection of the house from the point of view of securing the maximum of fresh air, sunlight and open spaces.

Small and narrow lots have been discouraged. In Toronto and its vicinity all land is much more expensive than in any other part of the province. In my opinion land values in the locality mentioned are unreasonably high, as compared with such values elsewhere. There has not been much difficulty in securing land at reasonable prices everywhere else for housing purposes. In this respect the special provisions of the Housing Act, with regard to the expropriation of land for Housing purposes, have been very effective. There have only been two arbitrations under these provisions, but the very existence of them has, in a great many municipalities, enabled land to be purchased at a reasonable price where otherwise this might not have been the case.

As a rule, outside Toronto and its vicinity and the Windsor district, the lots used for housing purposes under the Act are not less than forty feet frontage by one hundred feet in depth.

# Land Purchased by Housing Commissions:

The following Commissions have purchased land for the purpose of erecting houses thereon by the respective Commissions:

Acton	7	lots	for	\$2,000.00	averaging	\$285.71	per	lot	
Brantford	10	"	"	3,000.00	"	300.00	"	"	
Elmira	4	"	"	640.00	"	160.00	"	4.6	
Galt	5	"	**	1,250.00	"	250.00	"		
Guelph	11	"	"	2,830.00	"	257.27	"	**	
Hawkesbury	33	66	66	9,900.00	"	300.00	66	"	
London	9	"	"	2,350.00	"	261.11	"	"	
Milverton	8	"	"	1,400.00	"	175.00	"	"	
New Toronto	48	"	"	22,368.75	"	466.02	"		
Oshawa	153	"	"	24,825.00	**	162.25	"	"	
St. Catharines	22	"	"	4,645.00	"	211.14	"	"	
Sudbury	17	"	"	10,200.00	"	600.00		"	
Welland	4	"	"	1,425.00	. "	356.25	"	"	
Ottawa, 42 acres (or 328 lots)			"	162,000.00	"	493.90	• •	"	
Total	659	"	"	\$248,833.75	"	\$377.59	"	"	

In the case of Ottawa the price of the land includes \$40,000 for the laying out and development of it by the Commission. The average price of \$377.59 per lot is approximately \$10 per foot frontage and is reasonable. Where the Commissions purchased blocks of land these have been subdivided, laid out and developed. A considerable proportion of this land has not yet been built upon. It is proposed to do this in 1920. Several other Commissions are also contemplating the purchase of similar blocks of land for housing purposes.

Contained in this report are plans of developments at Ottawa, New Toronto, Trenton, and Iroquois Falls. Also of original subdivisions at Sudbury and Oshawa and of the same subdivisions as now laid out by the Department's Town Planners for proposed developments under the Housing Act.

# Housing Standards:

Apart altogether from the erection of houses to overcome the shortage of small houses, I think there is no doubt but that the Housing Standards for small houses will be improved in the municipalities where houses are erected under the Act. The result must be beneficial, and it is most probable that an improvement in the construction of such houses will be noticeable even after operations under the Act have been discontinued.

The Department has insisted upon a minimum size of rooms which is as follows:

Living room144				11	ft.
Dining room120	"	"	"	10	
Kitchen 80	"	"	"	8	"
Kitchenette 50	"	"	"	6	"
Bedroom No. 1		"	"	9	"
Bedroom No. 2	"	"	"	8	66
Bedroom No. 3	"	"	41	7	"
Bathroom	"	"	"	5	"

Where the kitchenette opens from the dining room with a doorway of six feet, the minimum combined width of dining room and kitchenette including the intervening partition may be fifteen feet.

The minimum height of ceilings is eight feet. Each room has a window area of not less than twelve sq. feet, and the bathroom of not less than six sq. feet.

It has been insisted upon that the floor joists should be of ample dimensions and that sufficient of them should be put in to remove any possibility of the floors sagging.

In semi-detached houses the division walls are of solid construction.

#### Reports of Officials:

The reports of the Department's Chief Architect, Town Planners and Sanitary Engineer, will also, it is expected, help to facilitate the future work of the Housing Department, as well as of the various Commissions. These reports and the plans published herewith should also be of assistance in the construction of houses which are not erected under the Act.

# Cost of Administration:

The cost to the province of the administration of the Housing Act up to the end of 1919 is as follows:

Salaries and other remuneration Travelling and other expenses Contingencies	2,505	77
_	\$20,536	49

This is practically for a period of seven months.

Forms, standard books of account, pass books, and housing reports are supplied free to all Housing Commissions. The cost of these for 1919 was about \$2,300 which is included in the above item of contingencies.

This Report is issued by the Bureau of Municipal Affairs.

J. A. Ellis,

January 15th, 1920.

Director.

# Municipalities which have come under the provisions of "The Ontario Housing Act, 1919."

_	Amount appropriated by Order- in-Council	Loans approved for houses erected in 1919	Housing Com-	Amount actually paid by Province on account of such Loans in 1919 for houses and land	houses which are not yet
Cities Belleville	$\begin{array}{c} \$ & c. \\ 25,000 & 00 \\ 250,000 & 00 \end{array}$	\$ c. 4,700 00 113,000 00	\$ c.	\$ c. 4,700 00 74,300 00	\$ c. 9,000 00 18,600 00
*Chatham	250,000 00	115,000 00	3,000 00	74,500 00	18,000 00
Fort William	250,000 00	9,500 00		9,500 00	
Galt	200,000 00	17,085 00	1,250 00	9,150 00	8,700 00
Guelph	$250,000\ 00$	67,556 00	2,830 00	66,000 00	14,050 00
Hamilton	500,000 00	296,150 00	• • • • • • • • • • • • • • • • • • • •	$211,050 \ 00$	134, 200 00
*Kitchener	100 000 00	56 770 00	2 250 00	•••••	
London Niagara Falls	$400,000 00 \ 300,000 00$	56,77000 $215,76500$	$2,350\ 00$	169,040 00	5,000 00
Ottawa	750,000 00	201,000 00	162,000 00	247, 369 00	12,000 00
Port Arthur	150,000 00	17,400 00	102,000 00	14,200 00	12,000 00
Sarnia	100,000 00	52,900 00		37,850 00	18,000 00
Sault Ste. Marie	200,000 00	180,450 00		149,874 60	18,000 00
St. Catharines	$150,000\ 00$	113,070 00-	4,645 00	80,790 00	12,000 00
Stratford	250,000 00	18,400 00		16,320 00	2,700 00
Welland,	250,000 00	65,650 00	1,425 00	36,325.00	6,600 00
Windsor Woodstock	$1,000,000 00 \ 100,000 00$	324,000000 $18,35000$		283,200 00	330,000 00
Woodstock	100,000 00	10, 350 00		16,900 00	
	5,125,000 00	1,771,746 00	177,500 00	1,426,568 60	588,850 00
Towns	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
*Arthur	25,000 00				
Brampton	100,000 00	3,000 00			
*Brockville					
*Bridgeburg	50,000 00	· · · · · • • • • · · · · · · · · · · ·			
*Burlington	41 000 00	11 000 00			
*Carleton Place	$\frac{41,000}{30,000} \frac{00}{00}$	41,000 00	••••		
*Cobourg	30,000 00				
Cochrane	75,000 00	36,000 00		32,300 00	
Englehart	8,000 00	8,000 00		7,261 00	
Ford City	150,000 00	149,900 00			
*Fort Francis,					
Goderich	100,000 00	5,000 00		1	2,050 00
*Gravenhurst					
*Haileybury Hawkesbury	150,000 00	134, 184 00	9.900 00	80,734 19	
*Hespeler	50,000 00	134, 164 00	9,900 00		
Ingersoll	75,000 00	16.950 00		16,950 00	5,500 00
Iroquois Falls	150,000 00	150,000 00			5,500 00
Leamington	50,000 00	14, 190 00		11,100 00	
*Leaside	100,000 00				
				11,750 00	
Listowel	50,000 00	23,000 00			
Merritton	25,000 00	7,500 00		1,200 00	4,500 00
Merritton Midland	25,000000 $75,00000$	$7,500\ 00$ $59,048\ 00$		$\begin{array}{c} 1,200 \ 00 \\ 59,048 \ 00 \end{array}$	4,500 00
Merritton	25,000 00	7,500 00		1,200 00	4,500 00

# Housing Standards:

Apart altogether from the erection of houses to overcome the shortage of small houses, I think there is no doubt but that the Housing Standards for small houses will be improved in the municipalities where houses are erected under the Act. The result must be beneficial, and it is most probable that an improvement in the construction of such houses will be noticeable even after operations under the Act have been discontinued.

The Department has insisted upon a minimum size of rooms which is as follows:

Living room144	sq. ft.	narrowest	dimension	11	ft.
Dining room120	"	"		10	
Kitchen 80	"	"	"	8	"
Kitchenette 50	"		"	U	
Bedroom No. 1		"	"	9	"
Bedroom No. 2	"	"	1	8	66
Bedroom No. 3	**	"	"	7	"
Bathroom 35	"	"	"	5	"

Where the kitchenette opens from the dining room with a doorway of six feet, the minimum combined width of dining room and kitchenette including the intervening partition may be fifteen feet.

The minimum height of ceilings is eight feet. Each room has a window area of not less than twelve sq. feet, and the bathroom of not less than six sq. feet.

It has been insisted upon that the floor joists should be of ample dimensions and that sufficient of them should be put in to remove any possibility of the floors sagging.

In semi-detached houses the division walls are of solid construction.

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#### Cost of Administration:

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0:4:	Ф			•	4
Cities Belleville	\$ c. 25,000 00	\$ c. 4,700 00	\$ c.	\$ c. 4,700 00	9,000 00
Brantford	$250,000\ 00$	113,000 00	3,000 00	74,300 00	18,600 00
Fort William	250,000 00	9,500 00		9,500 00	
Galt	200,000 00	17,085 00	$1,250\ 00$	9,150 00	8,700 00
Guelph	250,000 00	67,556 00	2,830 00	66,000 00	14,050 00
Hamilton	500,000 00	$296,150\ 00$		$211,050 \ 00$	134, 200 00
*Kitchener				•••••	
London	400,000 00	56,770 00	$2,350\ 00$	160 040 00	5,000 00
Niagara Falls	300,000 00 750,000 00	$215,765 00 \\ 201,000 00$	162,000 00	$169,040 00 \\ 247,369 00$	12,000 00
Ottawa Port Arthur	150,000 00	17,400 00	102,000 00	14,200 00	12,000 00
Sarnia	100,000 00	52,900 00		37,850 00	18,000 00
Sault Ste. Marie	200,000 00	180,450 00		149,874 60	18,000 00
St. Catharines	150,000 00	113,070 00-	4,645 00	80,790 00	12,000 00
Stratford	$250,000\ 00$	18,400 00		$16,320\ 00$	2,700 00
Welland,	250,000 00	65,650 00	1,425 00	36,325.00	6,600 00
Windsor	1,000,000 00	324,000 00	• • • • • • • • • • • • • • • • • • • •	283,200 00	330,000 00
Woodstock	100,000 00	18,350 00		16,900 00	
	5,125,000 00	1,771,746 00	177,500 00	1,426,568 60	588,850 00
		4		1	4
Towns	\$ c. 25,000 00	\$ c.	\$ c.	\$ c.	\$ c.
*Arthur Brampton	100,000 00	3,000 00			
*Brockville	100,000 00	3,000 00			
*Bridgeburg	50,000 00				
*Burlington					
Capreol	41,000 00	41,000 00			
*Carleton Place	30,000 00				
*Cobourg	75 000 00	26 000 00			
Cochrane Englehart	$75,000\ 00\ 8,000\ 00$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\begin{array}{c} 32,300 \ 00 \\ 7,261 \ 00 \end{array}$	• • • • • • • • • • • • • • • • • • • •
Ford City	150,000 00	149,900 00			•••••
*Fort Francis,	150,000 00				
Goderich	100,000 00	5,000 00		1,718 00	2,050 00
*Gravenhurst					
*Haileybury					
Hawkesbury	150,000 00	134, 184 00	9,900 00	80,734 19	
*Hespeler	50,000 00 75,000 00	16.950 00		16,950 00	5 500 00
Ingersoll	10,000 00			150,000 00	5,500 00
Ingersoll Iroquois Falls	150,000 00	150,000 00			
Ingersoll Iroquois Falls Leamington	$\begin{array}{c} 150,000 \ 00 \\ 50,000 \ 00 \end{array}$	$150,000\ 00$ $14,190\ 00$			
Iroquois Falls	$50,000 00 \ 100,000 00$			11,100 00	
Iroquois Falls Leamington *Leaside Listowel	50,000 00 100,000 00 50,000 00	14, 190 00 23, 000 00		11,100 00 11,750 00	
Iroquois Falls Leamington *Leaside Listowel Merritton	$\begin{array}{c} 50,000 \ 00 \\ 100,000 \ 00 \\ 50,000 \ 00 \\ 25,000 \ 00 \end{array}$	14, 190 00 23,000 00 7,500 00		11,100 00 11,750 00 1,200 00	4,500 00
Iroquois Falls Leamington *Leaside Listowel Merritton Midland	$\begin{array}{c} 50,000 \ 00 \\ 100,000 \ 00 \\ 50,000 \ 00 \\ 25,000 \ 00 \\ 75,000 \ 00 \end{array}$	23,000 00 7,500 00 59,048 00		11,100 00 11,750 00 1,200 00 59,048 00	4,500 00
Iroquois Falls Leamington *Leaside Listowel Merritton	$\begin{array}{c} 50,000 \ 00 \\ 100,000 \ 00 \\ 50,000 \ 00 \\ 25,000 \ 00 \end{array}$	14, 190 00 23,000 00 7,500 00		11,100 00 11,750 00 1,200 00 59,048 00	4,500 00

# Municipalities which have come under the Provisions of "The Ontario Housing Act, 1919."—Continued

<del></del> -	Amount appropriated by Order- in-Council	Loans approved for houses erected in 1919	Loans approved for land pur- chased by Housing Com- missions in 1919	Amount actually paid by Province on account of such Loans in 1919 for houses and land	houses which are not yet
Towns.—Continued	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
*North Bay					
*Niagara	30,000 00				
Oshawa	$600,000\ 00$	226,500 00	24,825,00	210,424 00	71,400 00
*Owen Sound			•••••	•••••	• • • • • • • • • • • • • • • • • • • •
*Palmerston Paris	50,000000 $60,00000$	59,000 00		50.800 00	
Perth	25,000 00	19,700 00		13,700 00	
Port Colborne	150,000 00	71,694 00		53,260 00	8,500 00
Port Dalhousie	50,000 00	9,731 00		700 00	
Renfrew	60,000 00	6,000 00		3,816 99	5,600 00
Sandwich	150,000 00	25,300 00		19,300 00	9,000 00
*Sioux Lookout	40,000 00	1 000 00	••••		15,000 00
Smith's Falls	60,000 00	4,000 00	••••	2,264 00	7,000 00
Sturgeon Falls	60,00000 $150,00000$	$8,500\ 00$ $94,000\ 00$	10,200 00	$8,500\ 00$ $89,900\ 00$	25,000 00
Thorold	50,00000	28,900 00	10,200 00	21.300 00	11.500 0
Timmins	40,000 00	3,000 00		2,500 00	12,000 00
Trenton	200,000 00	8,800 00		7,800 00	
*Uxbridge					
Walkerville	$250,000\ 00$	50,000 00		28,999 99	11,000 00
*Waterloo		7 400 00	• • • • • • • • • • • • • • • • • • • •	1 000 00	
Whitby	50,000 00	7,400 00	•••••	4,000 00	6,000 00
	3,649,000 00	1,311,897 00	$46,325\ 00$	1,007,826 17	194,050 00
Villages	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Acton	30,000 00	3,000 00	2,000 00	1,500 00	
Beaverton	20,00000	5,500 00	• • • • • • • • • • • • • • • • • • • •	4,000 00	• • • • • • • • • • • • • • • • • • • •
Chippawa	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$12,000 00 \\ 15,000 00$	640 00	$10,192 \ 10$ $10,240 \ 00$	
Elmira Fergus	50,00000	48,000 00	1040 00	30.688.79	
*Ge orgetown	30,000 00	40,000 00		30,000 15	
*Hensall					
Humberstone	50,000 00	12,305 00		7,150 00	
*Madoc	30,000 00				
New Toronto	200,000 00	135,000 00	22,368 75	105,096 36	24,000 00
Point Edward	30,000 00	12,000 00		6,531 40	6 500 00
Port Credit Port McNicoll	$100,000 \ 00$ $30,000 \ 00$	$\begin{array}{c} 19,500 \ 00 \\ 9,000 \ 00 \end{array}$		$18,000 00 \ 4,731 15$	6,500 00
Richmond Hill	25,00000	2,600 00		1,800 00	
Tara	10,000 00	4,000 00		4,000 00	3,000 00
*Victoria Harbor	$10,000\ 00$				
Woodbridge	50,000 00	9,000 00	• • • • • • • • • • • • • • • • • • • •	5,000.00	6,000 00
	735,000 00	286,905 00	25,008 75	208,929 80	39,500 00

# Municipalities which have come under the provisions of "The Ontario Housing Act, 1919."—Concluded

	Amount appropriated by Order- in-Council	Loansapproved for houses erected in 1919	Loans approved for land pur- chased by Housing Com- missions in 1919	Amount actually paid by Province on account of such Loans in 1919 for houses and	h ouses which are not yet
			1010	land	
		1	1	1	
Townships	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Barton	100,000 00	62,707 00		49,589 60	11,346 0
Brantford	$50,000\ 00$	24,700 00		14,500 00	
Etobicoke	150,000 00	24,000 00		4,055 00	
Guelph	$50,000\ 00$	3,000 00		1,500 00	
*Pickering	20,000 00			20. 475. 00	
Sandwich, E	50,000 00	54,975 00	• • • • • • • • • • • • • • • • • • • •		
*Scarborough	100,000 00	13.000 00	• · · · · · · · · · · · · · · · · · · ·	6,600 00	• • • • • • • • • • • • • • • • • • • •
S tamford	30,000,00 $30,000,00$	15,000 00		6,600 00	
*West Oxford	30,000 00				
York	500,000 00	125,044 00			107.894 0
10fk	500,000 00	125,044 00	• • • • • • • • • • • • • • • • • • • •	49,077 70	107,094 0
	1,120,000 00	307, 426 00		164,397 30	119,240 0
Totals of—	\$ c.	\$ c.	\$ c.	\$ c.	\$ c
Cities	5,125,00000	1.771.746 00	177,500 00	1, 426, 568 50	588,850 0
Towns	3,649,000 00	1.311.897 00	46, 325 00	1,007,826 17	194.050 0
Villages	735,000 00	286,905 00	25,008 75	208.929 80	39,500 0
Townships	1,120,0000	307, 426 00		164,397 30	119, 240 0
Grand Total	10,000,000,00	3,677,974 00	248, 833 75	2,807,721 87	941,640 0

<sup>\*</sup> Municipalities marked thus have not yet erected houses.

#### ACTON.

#### Houses Erected.

No. of Hor	es.	Loans.
1	six roomed, brick veneer	\$3,000

The Housing Commission has purchased seven lots for housing purposes for \$2,000, being an average of \$285,71 per lot.

#### BARTON TOWNSHIP.

#### Houses Erected.

No. of House 10 14	s. five roomed, solid bricksix roomed, solid brick	Loans. \$22,180 40,527
Total 24		\$62,707

In addition to the above, four applications for loans, aggregating \$11,346, have been approved for houses which are not yet erected.

### BEAVERTON.

#### Houses Erected.

No. of	Houses	5.								Loans.
	2	six	roomed,	brick	veneer	 	 	 	 	\$5,500

#### BELLEVILLE.

# Houses Erected.

No. of House 1 1	six roomed,	frame clapboard brick veneer			Loans. \$2,700 2,000
Total 2				_	\$4,700

In addition to the above, three applications for loans aggregating \$9,000, have been approved for houses which have not yet been erected.

## BRAMPTON. .

#### Houses Erected.

No. of	House	es.	Loans.
	1	six roomed, brick veneer	\$3,000

#### BRANTFORD.

# Houses Erected.

No.	of House 4 6 24 over	five roomed	, solid brick	, hollow tile	e or concrete		Loans. \$11,000 25,500 79,500
Tota	al 34					_	\$116,000

In addition to the above, five applications for loans aggregating \$18,600, have been approved for houses which have not yet been erected.

The Housing Commission has purchased ten lots for housing purposes for \$3,000, being an average of \$300 per lot.

The Commission is considering the purchase of a block of land for housing purposes.

### BRANTFORD TOWNSHIP.

#### Houses Erected.

No. of Houses.	Loans.
four roomed, frame clapboard finish	\$4,200
six roomed, frame stucco finish	6,000
3 six roomed, brick veneer	8,500
2 over six rooms, hollow tile	6,000
Total 9	\$24,700
CAPREOL.	

# Houses Erected.

No.	of Ho	ises.	Loans.
	14	six roomed, frame clapboard finish	\$41,000

#### CHIPPAWA.

#### Houses Erected.

No. of	Houses							Loans.
	4	over	six	rooms,	frame	clapboard	finish	 \$12,000

#### COCHRANE.

#### Houses Erected.

No. of Houses.	Loans.
five roomed, frame stucco finish	\$2,000
six roomed, frame stucco finish	6,000
3 six roomed, solid brick, hollow tile or concrete	10,500
1 over six rooms, frame stucco finish	3,000
3 over six rooms, brick veneer	7,800
2 over six rooms, solid brick, hollow tile or concrete	6,700
Total 12	\$36,000

#### ELMIRA.

#### Houses Erected.

No.	of	House	s.							Loans.
		6	six	roomed,	brick	veneer	 	 	 	 \$15,000

The Housing Commission has purchased four lots for housing purposes for \$640, being an average of \$160 per lot.

# ENGLEHART.

#### Houses Erected.

No. of Houses.	Loans.
six roomed, frame clapboard finish	\$2,500
1 over six rooms, frame clapboard finish	2,500
1 over six rooms, brick veneer	3,000
Total 3	\$8,000

# ETOBICOKE TOWNSHIP.

# Houses Erected.

No. of Houses.  4 six roomed, frame clapboard finish	
Total 8	\$24,000

# FERGUS.

### Houses Erected.

No. o	of Houses	S.								Loans.
	2	$\bar{s}ix$	roomed,	frame	stucco	finish	 	 	 	\$5,000
	5	six	roomed,	brick	veneer		 	 	 	13,000
	11	six	roomed,	solid	brick .		 	 	 	30,800
Total	18									\$48,800

The Fergus Housing Co., Ltd. has erected twelve of the above houses.

#### FORD CITY.

# Houses Erected.

No.	of Houses	s.	oans.
	6	six roomed, frame stucco finish\$:	18,000
	4	six roomed, brick veneer	11,500
	31	six roomed, solid brick, hollow tile or concrete 13	20,400
Total	1 41	\$1	49,900

# FORT WILLIAM.

#### Houses Erected.

	five roomed, br	ick veneer	Loans. \$3,600 6,500
Total 3			\$9,500

One of the above loans is to a returned soldier and includes the price of the lot.

#### GALT.

### Houses Erected.

		finish	Loans. \$7,800 9,285
Total 6			\$17.085

In addition to the above, three applications for loans, aggregating \$8,700, have been approved for houses which have not yet been erected.

The Housing Commission has purchased five lots for housing purposes for \$1,250, being an average of \$250 per lot.

#### GEORGETOWN.

The Housing Commission contemplates acquiring land and erecting houses in 1920.

#### GODERICH.

#### Houses Erected.

No. of	House 1 1	six	roomed,										
	_											-	
Total	2												\$5,000

In addition to the above, an application for a loan of \$2,050 has been approved for a house which has not yet been erected.

#### GUELPH.

#### Houses Erected.

No. of House	S.	Loans.
1	four roomed, solid brick	\$2,550
1	five roomed, brick veneer	2,300
5	six roomed, frame stucco finish	13,974
2	six roomed, brick veneer	5,950
14	six roomed, solid brick, hollow tile or concrete	42,782
_		
Total 23		\$67,556

Of the above, twenty-one are detached houses and two are semi-detached.

In addition to the above, four applications for loans, aggregating \$14,050, have been approved for houses which are not yet erected.

The Housing Commission has purchased eleven lots for housing purposes for \$2,830, being an average of \$257.27 per lot.

The Commission is also contemplating acquiring a large block of land for housing.

#### GUELPH TOWNSHIP.

#### Houses Erected.

No. o	f Hous	ses.					Loans.
	1	six	roomed,	frame,	stucco	finish	 \$3,000

# HAMILTON.

#### Houses Erected.

No. of House 2 82	six roomed, frame clapboard finish \$	oans. 6,000 0,150
-		
Total 84	\$29	6,150

In addition to the above, thirty-six applications for loans, aggregating \$134,200, have been approved for houses, which are not yet erected.

#### HAWKESBURY.

#### Houses Erected.

No.	of Hous	es.									Loans.
	4	five	roomed,	solid	brick,	hollow	tile or	con	crete	 	\$16,000
	2 ove	er six	rooms, bi	ick v	eneer .					 	4,000
	29 ov	er six	rooms, so	olid br	ick, ho	llow tile	or con	crete		 	114,184
										_	,
Tota	1 35										\$134,184

Of the above, five are detached houses and thirty are semi-detached.

The Riordon Annex Housing Co., Ltd. has erected thirty-three of the above houses. This Company has also purchased thirty-three lots for housing purposes for \$9,900, being an average of \$300 per lot.

### HUMBERSTONE.

## Houses Erected.

No. 0	f Houses		Loans.
	1	four roomed, frame clapboard finish	\$1,670
	1	five roomed, frame clapboard finish	2,235
	1	six roomed, frame clapboard finish	2,400
	1	six roomed, brick veneer	3,000
	1	seven roomed, frame clapboard finish	3,000
Total	5		\$12,305

#### INGERSOLL.

### Houses Erected.

No. of	House	S.	Loans.
	1	five roomed, frame stucco finish	\$2,200
	5	six roomed, frame clapboard finish	12,450
	1	seven roomed, frame clapboard finish	2,300
Total	7		\$16,950

In addition to the above, two applications for loans, aggregating \$5,500, have been approved for houses which are not yet erected.

#### IROQUOIS FALLS.

#### Houses Erected.

		six						
Total	-	SIA	rooms,	Trame	stucco	misn	_	\$150,000

All the above are semi-detached houses.

The Iroquois Falls Housing Co., Ltd., has erected all the above houses.

#### KITCHENER.

The Dominion Rubber System Housing Company, Waterloo, Limited, contemplates acquiring land and erecting a large number of houses in 1920.

#### LEAMINGTON.

#### Houses Erected.

	six roomed, frame clapboard finishsix roomed, solid brick, hollow tile, or concrete finish	Loans. \$11,190 3,000
Total 5		\$14.190

#### LISTOWEL.

#### Houses Erected.

No. of	Houses 1 8	six	roomed,				\$3,000 \$20,000
Total	9						\$23,000

Of the above, seven are detached houses and two are semi-detached. The Listowel Housing Co., Ltd., has erected six of the above houses.

#### LONDON.

# Houses Erected.

No. of	f Houses	s.	Loans.
	3	four roomed, frame clapboard finish	\$5,300
	5	five roomed, brick veneer	13,570
	14	six roomed, brick veneer	37,900
Total	22		\$56,770

In addition to the above, two applications for loans, aggregating \$5,000, have been approved for houses which are not yet erected.

The Housing Commission has purchased nine lots for housing purposes for \$2,350, being an average of \$261.11 per lot.

The Commission has also under consideration the purchase of a block of land of eleven acres known as "Pinelawn."

#### MERRITTON.

#### Houses Erected.

No. of House	S.	Loans.
1	four roomed, frame clapboard finish	\$2,300
1	five roomed, frame stucco finish	2,500
1	six roomed, frame clapboard finish	2,700
Total 3		\$7,500

In addition to the above, two applications for loans, aggregating \$4,500, have been approved for houses which are not yet erected.

#### MIDLAND.

### Houses Erected.

No. of House	s.	Loans.
3	five roomed, frame clapboard finish	\$6,180
4	six roomed, frame clapboard finish	11,150
14	six roomed, brick veneer	41,718
Total 21		\$59,048

# MILTON.

#### Houses Erected.

No. of House	s.				Loans.
2	six	roomed,	brick	veneer	 \$6,000

#### MILVERTON.

#### Houses Erected.

No.	of	Houses									Loans.
		8	six	roomed,	solid	brick,	hollow	tile	$\mathbf{or}$	${\bf concrete}$	 \$28,800

The Housing Commission has purchased eight lots for housing purposes for \$1,400, being an average of \$175.00 per lot.

# MIMICO.

#### Houses Erected.

No. of	f House	s. I	oans.
	1	five roomed, solid brick, hollow tile or concrete	\$2,800
	1	six roomed, solid brick, hollow tile or concrete	4,000
Total	2		\$6,800

#### NEW TORONTO.

#### Houses Erected.

No.	of Houses 20 25	five				concrete	Loans. \$60,000 75,000
						<del></del>	
Tota	1 45						\$135,000

Of the above, eleven are detached houses and thirty-four semi-detached.

In addition to the above, eight applications for loans, aggregating \$24,000, have been approved for houses which are not yet erected.

The Housing Commission has purchased land and subdivided it into forty-eight lots for housing purposes for \$22,368.75, being an average of \$466.02 per lot. Each lot has 25 ft. frontage with an average depth of about 125 ft.

#### NIAGARA FALLS.

#### Houses Erected.

No. of	f Houses	<b>3.</b>		Loans.
	1	five	roomed, frame clapboard finish	\$2,000
	57	six	roomed, frame clapboard finish	146,515
	12	six	roomed, brick veneer	38,375
	1 over	six	rooms, frame clapboard finish	3,000
	1 over	six	rooms, frame stucco finish	3,475
	5 over	six	rooms, brick veneer	15,400
			rooms, solid brick, hollow tile or concrete	7,000
	_		_	
Total	79			\$215,765

A number of the above loans are to returned soldiers and include the price of the land.

#### OTTAWA.

#### Houses Erected.

No. of	f H	ouses			Loans.
	2		five	roomed, solid brick, hollow tile or concrete	\$8,000
	3		six	roomed, frame clapboard finish	9,000
	10		six	roomed, frame stucco finish	30,000
	6		six	roomed, brick veneer	18,000
	15		six	roomed, solid brick, hollow tile or concrete	60,000
	1	over	six	rooms, frame stucco finish	3,000
	3	over	six	rooms, brick veneer	9,000
	16	over	six	rooms, solid brick, hollow tile or concrete	64,000
				_	
Total	56				\$201,000

In addition to the above, three applications for loans, aggregating \$12,000, have been approved for houses which have not yet been erected.

The Housing Commission has purchased about twenty-two acres of land known as "Lindenlea" for housing purposes for \$62,000. The Commission is also purchasing twenty acres of land known as "Parkdale" for \$60,000. It is estimated that \$40,000 will be expended in the layout and development of these two pieces of land.

The total cost of the land is therefore \$162,000. There will be 328 lots, making an average of \$493.90.

#### OSHAWA.

#### Houses Erected.

No.	of Houses		Loans.
	1	four roomed, frame clapboard finish	\$1.600
	4	five roomed, brick veneer	10.000
	66	six roomed, brick veneer	206.900
	3	six roomed, solid brick, hollow tile or concrete	8,000
		_	
Tota	1 74		\$226 500

In addition to the above, twenty-one applications for loans, aggregating \$71,400, have been approved for houses which are not yet erected.

The Housing Commission has purchased 153 lots for housing purposes for \$24,825, being an average of \$162.25 per lot.

# PARIS.

# Houses Erected.

Houses Erected.	
No. of Houses.  3 five roomed, frame clapboard finish 2 five roomed, brick veneer 6 six roomed, frame clapboard finish 3 six roomed, frame stucco finish 4 six roomed, solid brick, hollow tile or concrete 1 over six rooms, frame clapboard finish  Total 19	6,000 18,000 9,000 16,000
PERTH.	
Houses Erected.	
No. of Houses.  1 four roomed, frame clapboard finish 3 five roomed, frame clapboard finish 3 six roomed, frame clapboard finish	8,220
Total 7	\$19,700
POINT EDWARD.	
Houses Erected.	
No. of Houses.  3 six roomed, frame clapboard finish  1 over six rooms, frame clapboard finish	
Total 4	\$12,000
PORT ARTHUR.	
Houses Erected.	
No. of Houses.  3 five roomed, frame clapboard finish	
Total 6	\$17,400
PORT COLBORNE.	
Houses Erected.	
No. of Houses.  9 six roomed, frame clapboard finish 5 six roomed, frame stucco finish 10 six roomed, brick veneer 1 over six rooms, frame clapboard finish 1 over six rooms, solid brick, hollow tile or concrete	
Total 26	\$71,694

In addition to the above, three applications for loans, aggregating \$8,500 havebeen approved for houses which are not yet erected.

#### PORT CREDIT.

#### Houses Erected.

No. of	House 1 6	s. four roomed, solid bricksix roomed, solid brick	Loans. \$1,500 18,000
Total	7		\$19,500

In addition to the above, two applications for loans, aggregating \$6,500, have been approved for houses which are not yet erected.

#### PORT DALHOUSIE.

## Houses Erected.

No.	of	Houses	s.					Loans.
		5	five	roomed,	frame	clapboard	finish	 \$12,389

# PORT McNICOLL.

# Houses Erected.

No. of	Houses	s.					Loans.
	3	six	roomed,	frame	clapboard	finish	\$9,000

#### RENFREW.

### Houses Erected.

No. of	Houses	s.					Loans.
	2	six	roomed,	frame	stucco	finish	 \$6,000

In addition to the above, two applications for loans, aggregating \$5,600, have been approved for houses which are not yet erected.

#### RICHMOND HILL.

# Houses Erected.

No.	of	Houses	š.								Loans.
		1	six	roomed,	brick	veneer	 	 	 	 	\$2,600

#### SANDWICH.

#### Houses Erected.

No. of Houses.  1 five roomed, solid brick, hollow tile or concrete	2,600 5,500 8,000
Total 8	\$25,300

In addition to the above, three applications for loans, aggregating \$9,000, have been approved for houses which are not yet erected.

#### SANDWICH EAST TOWNSHIP.

#### Houses Erected.

No. of House 1 1 1 12	four roomed, solid brick, hollow tile or concrete  five roomed, solid brick, hollow tile or concrete six roomed, solid brick, hollow tile or concrete	Loans. \$3,525 3,450 48,000
Total 14		\$54,975

#### SARNIA.

#### Houses Erected.

No. of Houses	s.	Loans.
2	four roomed, frame clapboard finish	\$4,900
16	six roomed, frame clapboard finish	48,000
-		
Total 18		\$52,900

In addition to the above, six applications for loans, aggregating \$18,000, have been approved for houses which are not yet erected.

#### SAULT STE. MARIE.

#### Houses Erected.

No. of	f Houses	3.	Loans.
	1	four roomed, frame clapboard finish	\$2,000
	11	five roomed, frame clapboard finish	34,850
	13	five roomed, frame stucco finish	42,400
	8	five roomed, brick veneer	26,400
	8	six roomed, frame clapboard finish	25,800
	1	six roomed, frame stucco finish	3,600
	13	six roomed, brick veneer	39,100
	2	six roomed, solid brick, hollow tile or concrete	6,300
Total	57		\$180,450

Of the above, fifty-five are detached houses and two are semi-detached. A number of the above loans are to returned soldiers and include the price of the land.

In addition to the above, five applications for loans, aggregating \$18,000, have been approved for houses which have not yet been erected.

#### ST. CATHARINES.

#### Houses Erected.

No.	of H	ouses.		Loans.
	7	fi	ive roomed, frame clapboard finish	\$16,350
	25	S	ix roomed, frame clapboard finish	71,420
	7	S	six roomed, frame stucco finish	20,200
	1	S	six roomed, solid brick, hollow tile or concrete	2,800
	1	over s	six rooms, frame clapboard finish	2,300
			2 x 1 = 0 Tm	
Tota	al 41			\$113,070

In addition to the above, four applications for loans, aggregating \$12,000, have been approved for houses which are not yet erected.

The Housing Commission has purchased twenty-two lots for housing purposes for \$4,645, being an average of \$211.14 per lot.

#### SIOUX LOOKOUT.

Five applications for loans, aggregating \$15,000, have been approved for houses which are not yet erected.

#### SMITH'S FALLS.

#### Houses Erected.

No. of Houses.	Loans.
1 over six rooms, solid brick	\$4,000

In addition to the above, two applications for loans, aggregating \$7,000, have been approved for houses which are not yet erected.

#### STAMFORD TOWNSHIP.

#### Houses Erected.

No. o	f Hous	es.								Loans.
	2	six	roomed,	frame	clapboard	finish	 	 		\$6,000
	1	six	roomed,	brick	veneer .		 	 		3,000
	1	six	roomed,	solid	brick		 	 		4,000
									_	
Total	4									\$13,000

### STRATFORD.

#### Houses Erected.

No. of Houses	S.			Loans.
7	six roomed,	brick	veneer	 \$18,400

In addition to the above, one application for a loan of \$2,700, has been approved for a house which has not yet been erected.

#### STURGEON FALLS.

#### Houses Erected.

No. of Ho	uses.					Loans.
3	six	roomed,	frame	clapboard	finish	 \$8,500

#### SUDBURY.

#### Houses Erected.

No.	of Hous		Loans.
	2	four roomed, frame clapboard finish	\$3,000
	<b>2</b>	five roomed, frame stucco finish	6,000
	3	six roomed, frame clapboard finish	9,000
	22	six roomed, brick veneer	66,000
	1	six roomed, solid brick, hollow tile or concrete	4,000
	1 ove	r six rooms, frame clapboard finish	3,000
	1 ove	er six rooms, brick veneer	3,000
Tota	1 32		\$94,000

In addition to the above, eight applications for loans, aggregating \$25,000, have been approved for houses which have not yet been erected.

The Housing Commission has purchased seventeen lots for housing purposes for \$10,200, being an average of \$600 per lot.

The Commission is also contemplating purchasing about forty acres and developing it for housing.

#### TARA.

#### Houses Erected.

No.	of Houses.		Loans.
	1 over six rooms,	solid brick	 <b>\$4,0</b> 00

In addition to the above, an application for a loan of \$3,000 has been approved for a house which has not yet been erected.

#### THOROLD.

#### Houses Erected.

No. of House		Loans.
1	four roomed, frame clapboard finish	\$1,900
3	five roomed, frame clapboard finish	8,500
7	six roomed, frame clapboard finish	18,500
-	-	
Total 11		\$28,900

In addition to the above, four applications for loans, aggregating \$11,500, have been approved for houses which are not yet erected.

#### TIMMINS.

#### Houses Erected.

No. o	f House	S.	Loans.
	1	six roomed, frame clapboard finish	\$3,000

In addition to the above, four applications for loans, aggregating \$12,000, are pending.

#### TRENTON.

#### Houses Erected.

No. of	_			rooms	hriok	voncor												Loans. \$5.000
	1	over	six	rooms,	solid	brick	  	 	 	 	  	· ·	· ·	 		· ·		3,800
	•																-	
Total	3																	\$8.800

#### WALKERVILLE.

#### Houses Erected.

No.	of He	ouses.	64	Loans.
	1	five	roomed, frame clapboard finish	\$3 000
	3	five	roomed, frame stucco finish	9,000
	1	five	roomed, brick veneer	3.000

No. of Houses.	Loans.
3 six roomed, frame clapboard finish	9,000
six roomed, brick veneer	6,000
six roomed, solid brick, hollow tile or concrete	8,000
2 over six rooms, frame stucco finish	6,000
2 over six rooms, brick veneer	6,000
Total 16	\$50,000

In addition to the above, three applications for loans, aggregating \$11,000, have been approved for houses which are not yet erected.

## WATERLOO.

The Dominion Rubber System Housing Company, Waterloo, Limited, contemplates acquiring land and erecting a large number of houses in 1920.

#### WELLAND.

#### Houses Erected.

No. o	f/House	S.	Loans.
1	5	six roomed, frame clapboard finish	\$14,200
	3	six roomed, brick veneer	9,000
	11	six roomed, soliid brick, hollow tile or concrete	42,450
Total	19		\$65,650

In addition to the above, two applications for loans, aggregating \$6,600, have been approved for houses which are not yet erected.

The Housing Commission has purchased four lots for housing purposes for \$1,425, being an average of \$356.25 per lot.

#### WHITBY.

#### Houses Erected.

No. of Houses.  1 six roomed, frame clapboard finish 2 six roomed, brick veneer	Loans. \$2,400 5,000
Total 3	\$7,400

In addition to the above, two applications for loans, aggregating \$6,000, have been approved for houses which have not yet been erected.

#### WINDSOR.

#### Houses Erected.

No. o	f Houses	s.	Loans.
	4	five roomed, frame clapboard finish	\$12,000
	3	five roomed, frame stucco finish (2 finished)	9,000
	1	five roomed, brick veneer (finished)	3,000
	29	six roomed, frame clapboard finish (20 finished)	87,000
	9 .	six roomed, frame stucco finish (4 finished)	27,000
	10	six roomed, brick veneer (9 finished)	30,000
	39	solid brick, hollow tile, or concrete (7 finished)	156,000
		the control of the co	
Total	95		\$324,000

Of the above, ninety-three are detached houses and two are semi-detached.

In addition to the above, eighty-eight applications for loans, aggregating \$330,000 (sixty-six at \$4,000 and twenty-two at \$3,000), have been approved for houses which are not yet erected.

#### WOODBRIDGE.

# Houses Erected.

No. of Houses.					
	3	six roomed, solid brick, hollow tile or concrete	\$9,000		

In addition to the above, two applications for loans, aggregating \$6,000, have been approved for houses which are not yet erected.

#### WOODSTOCK.

# Houses Erected.

No. of	House	S.	Loans.
	2	five roomed, frame, stucco finish	\$4,350
	1	six roomed, frame, shingled finish	2,700
	3	six roomed, frame, stucco finish	8,300
	1	six roomed, frame, stucco and shingles	3,000
		-	
Total	7		\$18,350

#### YORK TOWNSHIP.

#### Houses Erected.

No. of Ho	uses.				Loans.
2	six roomed,	, frame clap	board finish	 	\$5,800
9	six roomed	, brick venee	er	 	24,100
29	six roomed	, solid brick		 	95,144
				_	
Total 40					\$125,044

Of the above, thirty-eight are detached houses and two are semi-detached. In addition to the above, thirty applications for loans, aggregating \$107,894, have been approved for houses which are not yet erected.

#### REPORT OF CHIEF ARCHITECT.

From the work reviewed under the Ontario Housing Act during the past year some conclusions may be emphasized for the guidance of the Commissions which have not yet started operations, but which intend to do so. They may also prove valuable to some of those operating even where considerable progress has already been made.

(1) Steady improvement in the quality of the plans received has been noticed with each succeeding month; and it is quite evident that where competent professional assistance is obtained by a Commission mistakes are avoided, economies are effected and the results in general will more than justify the expenditure on such service.

More careful study of elevations to preserve simplicity and get better proportion between parts is required for many of the schemes submitted for approval. This can only be done by men trained in design, but the employment of Architects at the ordinary professional rates of remuneration is impossible for each individual house.

Owing to possible repetition of designs or variations not requiring separate sets of drawings, possibility of using standardized details and specifications, etc.; the services of the best architects experienced in this work can be obtained at a much lower cost per house than is usually charged for individual services on a single house.

Co-operation between the local branches of the Architectural and Art Associations, Societies, etc., and the Housing Commissions might produce the desired improvement, but the creation of a central bureau to pass judgment on the aesthetic merit or demerit of each application would not, in our opinion, be desirable.

Much educational work along these lines requires to be done throughout the Province and how that it to be stimulated is a question which should be studied by every individual interested in the improvement of our Ontario homes. The various Housing Commissions operating throughout the Province during the past year should be congratulated on the advances they have made and should receive every encouragement to go further in their good work, for which, in too many cases, they have received too much criticism and no active help from the professional bodies which could do so much by co-operating.

#### Houses Built for Individual Applicants.

Of the total number of loans made last year a large proportion was to individuals for the erection of their own homes. While it is true that this is not an economical way of providing houses in large quantities in a short period of time, there are many reasons for encouraging this phase of the work under the Housing Act.

(2) Splendid results have been obtained by many applicants who have carried out a great deal of the work on their own houses. This should be encouraged for at least two reasons, one—to develop craftsmanship, and the other—to help to keep down the amounts required for loans.

In my opinion Commissioners should take advantage of every opportunity to foster this spirit among applicants. It should be clearly understood that a man or woman contemplating the purchase of a home has a natural interest in its building, which is not satisfied by simply presenting him or her with the front door-key.

Wherever possible they should be encouraged to do their own home building; and failing that, the most lasting satisfaction will be got when they are allowed to exercise some control over the work from the development of their plan to its final realization as the home.

# BUILDING HOUSES IN QUANTITIES.

(3) There is no limit to the number of types of houses which can be built under the Act. They are as numerous and as distinctive as the human individual, but it has been clearly proven that the only way to get low costs is to erect houses in quantity with standardized parts. This can be done and still provide the necessary variety in external appearance.

When houses are being built in quantities it is essential that the attention of Commissions be drawn to the fact that in this case they are not only building houses, but also a community; and the appearance of the streets must be considered as well as each house. In a small town the erection of fifty or a hundred houses is a large percentage of the total number in the town. If these houses are attractive they will be an asset; on the other hand if poorly designed and badly situated they will detract from the appearance of the town as a whole, and are apt to become a liability and the beginning of a slum district.

(4) In some localities bungalows consisting of cellar and all rooms on the ground floor have been erected for less cost than houses of two storeys, having the same accommodation and built of similar materials.

The only explanation which can be given is that with the present high cost of labour—the hoisting of materials to first floor and roof more than offsets the cost of the extra cellar and roof areas of the bungalow.

- (5) Sufficient educational work has been done under the Act to show that houses three rooms deep are not necessary or desirable except on unusually wide lots or, in very special circumstances, on very narrow lots. No exceptions will be made to the side clearances demanded in the "Report re Housing," printed last year, in checking plans of the three room deep type unless the middle room has a window to the rear in a break in line of side wall.
- (6) Too much attention cannot be given to the placing of houses on lots so that they will get the full benefit of direct sunlight into as many rooms as possible, especially during the winter months, when it is almost impossible to get sun purified air into homes through open windows and doors.

In many cases the placing of a verandah right across the front of a house has the effect of shutting sunlight out of a room throughout the entire year. This should be emphatically condemned in our climate where the ordinary verandah can only be used for a very few months of the year at most.

(7) Low cost housing can only be obtained by eliminating every foot of waste space. This has the inevitable effect of restricting the size of the kitchen. As this is the workroom much greater attention should be given by planners to the traffic lines through the kitchen and the relation between door openings and furniture spaces.

<sup>3</sup> R.H.

It has been only too evident during the past year that these features have not been given a sufficient amount of consideration. A small kitchen is only satisfactory when traffic lines will leave enough wall and floor space to accommodate the furniture which is essential for the work to be performed.

When this point has been studied it will be found that it is rarely desirable to provide a separate door opening right out to the rear of the lot, in addition to the grade entrance to the cellar, which should also communicate with the kitchen.

(8) Climatic conditions throughout most of Ontario make it extremely desirable to provide vestibule protection to the front door. This is even more important when the front door opens into a living room without any hallway.

The omission of a vestibule in such a case may result in a slight saving in cost, but it will never provide satisfactory living conditions here in winter. In every instance of this kind presented to us, we have noticed that there were other features of lesser importance which could have been omitted to keep the cost at the same figure.

- (9) Some provision of space should be made for the hanging of hats and coats near the front entrance.
- (10) Other features requiring study to keep the cost down but which seem too often to be ignored are:

Partitions on first floor should, wherever possible, come over ground floor partitions to save cost of beaming and permit of straight riser ducts for heating.

Plumbing fixtures should be arranged for bathroom, kitchen and laundry so as to make only one soil-stack necessary.

Hall and staircase space should be kept down to the smallest possible dimensions.

Simplicity in roof construction is essential. Hips, valleys, flashings, etc., in roofs are not only costly to build, but also expensive in maintenance.

(11) As the cost of a house varies with its cubical contents the old fashioned large airy room is no longer economically possible. It, therefore, follows that it is now all the more necessary to study carefully the ventilation of our smaller houses and the value of the materials used in their construction from the standpoint of insulation against cold and heat.

In summer time, cross ventilation through windows is essential and on narrow lots this question could receive more thought than is usually given to it.

A great many schemes are submitted in which tops of windows are indicated too low down from the ceiling. In bedrooms especially, the distance from ceiling down to glass line should not exceed twelve inches.

- (12) Where any part of the floor of a room comes over an open space below, such as a verandah, etc., special attention should be given to insulating the exposed area. The additional comfort in winter obtainable by the use of dry shavings insulation protected from dampness on both sides by water proof paper will more than justify the very slight extra cost of such precaution.
- (13) A tendency to make windows too small has been evident in many of the schemes submitted.

The areas demanded by the regulations are the minimum and in many cases should be exceeded. More satisfaction would be obtained if the glass area for each room were not less than ten per cent. of the floor area, where such an allowance would exceed the present minimum requirements.

- (14) Where the temperature falls below zero it would appear that a good furnace is absolutely essential in a home. Some applicants evidently think that a furnace should only be thought of after they have crowded the outside of the house with useless, supposedly ornamental features and so-called "trim."
- (15) Where there are local by-laws they must be followed in construction under the Housing Act. In some cases the requirements of these by-laws are unnecessarily severe and the local Commissioners should endeavour to have them modified to reduce the cost of building small houses.
- (16) Building conditions in Ontario vary so much that it is undesirable to attempt to write a specification which would be acceptable everywhere in the Province. Results up to date, however, indicate that no stucco should be used which is not damp proofed.
- (17) A special paper on the insulating qualities of various materials commonly used in house construction is being prepared and will follow publication of this report as soon as certain experimental work, now being undertaken, has been completed.

JAMES GOVAN,

Chief Architect.

# REPORT OF DEPARTMENT'S TOWN PLANNERS.

In accordance with your request, we have prepared the following report on what has come under our consideration concerning matters falling under the general heading of Town Planning in the administration of the Ontario Housing Scheme.

#### THE NATURE OF OUR WORK.

The nature of our work consists of two distinct parts: The first is to see that the requirements are carried out by the Municipal Commissions, as set forth by the Housing Act itself, and the rules and regulations which accompany it, in so far as they deal with the physical fitness of the property bought or accepted by the local Commissions for housing purposes, and with the location of the buildings thereon.

The second is to give constructive advice to the Municipal Commissions, their applicants, their architects, or their engineers, in such matters as: the selection of the property to be acquired by them for housing projects; the subdivisions of the same; to report as well upon individual lots, concerning which there may be question; and, in general, to point out where the house, erected under their directions, may make the properties of the applicants of the greatest possible value from a practical point of view to the purchaser and to the municipality. To accomplish this, advice has been given verbally at the time of our visits to them; reports, analyzing the problems involved have been made, and sketches accompanied such reports where they seemed necessary.

#### SUPERVISION OF THE REQUIREMENTS AS SET FORTH BY THE ACT.

In our capacity of reporting upon the activities of the Commissions, the block plans submitted by them and the suitability of the property, accepted, or purchased by them, we have very generally found a spirit of co-operation, and have been able, after explaining the purpose of the questioned clauses, requirements, etc., to not only have these requirements conformed to readily, but to have them recognized as minimums, and to have gained an appreciation of the advisability of keeping as far as possible above these minimums.

We have found that: the needs of no two municipalities are exactly alike, land values and construction cost vary widely with the number of vacant subdivided lots within the municipality, and the degree to which they are already served by municipal improvements; the location of industries within a municipality must be the governing factors in advising the Housing Commission whether (a) to accept only applications of individuals; (b) to accept only applications of housing companies; (c) to only purchase land en bloc for subdivision and turn the lots over to applicants at cost; (d) or whether to adopt two or all of the above policies. In case the policy of subdivision of property has been adopted, we have been asked to advise whether one large project is preferable to two or more smaller ones located in different parts of the municipality, and upon what we base our conclusions.

# BLOCK PLANS FOR HOUSING PROJECTS IN SUBDIVISIONS.

In the consideration of block plans for housing projects, we find that the arrangements of the house can usually make the streets, upon which they face, more attractive than is the case where the applicant is governed by conditions already fixed. Many things tending toward economy can be easily arranged for, if the location and floor grades of the houses are studied generally, in their relation to each other, and the requirements of grades necessary for economical development. The block plan makes it possible to select house locations reasonably close together, so that contracts for a number of houses of the same type may be awarded and constructed, and a second contract may later be awarded for houses of a different type, which can be placed between those first erected. In this way, the dangers of too close duplication of houses of the same type prevalent in quantity construction, can be overcome.

#### BLOCK PLANS OF INDIVIDUAL LOTS.

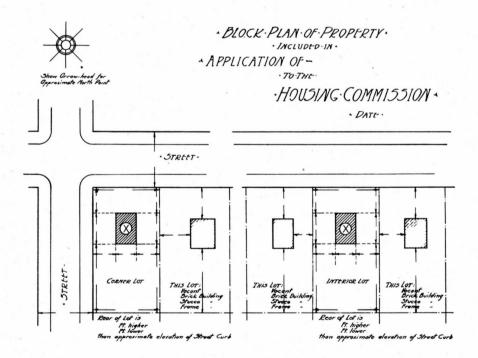
In addition to the requirements that block plans, of housing subdivisions, or projects, showing the arrangement of the houses upon the lots, be submitted, the further request that a block plan, showing the location of the individual house on the lot, be forwarded with the application and house plans, has enabled us to easily give constructive advice at the same time that it is given regarding the house, itself. This request has also enabled us to assure ourselves that the requirements as to distance from property lines and adjoining houses, etc., are observed, without the numerous visits which would otherwise be required.

We have given, together with the Department's architect, considerable attention to the architectural block plans for the individual lots for the following reasons:

- (a) Light and air are very important and light can often be greatly improved by inverting the plan of the house, that is, having the living rooms face the south or east rather than the north or west, as they might be shown.
- (b) Houses on adjoining lots can often be so arranged that service walks for both houses may be adjoining, and that later they may be used for motor runways to future garages. This is a distinct economy where it can be arranged, and is practical.
- (c) Space can often be arranged to allow an entrance over the lot to a future garage by moving a house one or two feet one way or the other. This will give additional value to the property.
- (d) Where applications for houses on adjoining lots are submitted at different times, we are able to advise against too frequent duplication of the same front elevation along the street.
- (e) When the rear of a lot is high or low, grading cost can often be saved by not following the usual procedure of building the houses all along a line the same distance from the street, but by making a study of the particular situation. The saving effected in this way is often considerable.

By giving consideration in these ways to each of the above possibilities, the applicants to the municipality which adopts the individual lot procedure, receive more nearly the constructive benefits, which accrue to the applicant to the municipality which adopts the procedure of purchasing land and subdividing it.

We are only able to give thorough consideration to the individual block plans when all the governing measurements and figures are supplied, and when it is necessary to secure these by letter after the application has been received delay is unavoidable. In order to make clear what is necessary in this regard, we have shown by the illustration below the measurements which are required, showing by the spaces between the arrows where figures should be filled in. One example on the illustration applies to the corner lot and the other to the interior lot. This also illustrates the information required as to the character of the house, if any, upon the adjoining lot, as well as asking for some idea as to how much higher or lower the rear of the lot is than the curb of the street upon which it fronts. Such a block plan, as shown, would apply to almost any condition or orientation, by adding an arrow head to the line most nearly corresponding to north, and the measurements thereon would apply to the irregular lot as well as to one which is regular.



# Considerations in the Selection and Subdivision of Land for Housing Projects.

During this year we have advised regarding the developments already undertaken or considered by the Municipalities of Brantford, Fergus, Hawkesbury, Kitchener, Ingersoll, Iroquois Falls, Leaside, London, Mimico, New Toronto, Oshawa, Ottawa, Sudbury, and Waterloo. Four of the above municipalities have either not yet committed themselves definitely to undertake the project, or have deemed it wise to postpone the development.

In reviewing the above, we find that there are two kinds of property which have been selected; the first is what is known on the assessment rolls as "Farm Land," and the second is property which has already been subdivided, but from which none, or very few lots have been sold.

The determining factors in the selection of property for a housing project are: the cost of the land; the cost of the development of it, including local improvements necessitated by the extension of municipal utilities; and its location and accessibility to the industries of the municipality. The so-called "Farm Land" is usually the cheapest in its first cost, but it has been found in such municipalities as New Toronto, Mimico, Oshawa, and Sudbury, that the cost of installing such utilities to such farm land as is available, along streets which are at present not built upon, would not be practical or economical. Although the development costs of the above projects are necessarily little more than estimates at the present time, we think that the property which admits of the lowest development cost is not necessarily that which has an even surface. Oftentimes the problem of handling the excavation and resurfacing the resulting surface is more expensive than when there are areas which require to be filled with the material from the excavations, which allows the house floor to be fixed at a grade requiring fill over a small area of the lot, thus leaving a large area of the surface of the lot undisturbed.

# TOPOGRAPHIC PLAN.

The first step for a Commission to take after having selected the site is to have levels taken over the property, if it has any variance in grades, and have these levels mapped into a topographic plan. Upon this plan, all existing trees, buildings and rock outcrops, should be shown, as well as all adjoining streets and streets intersecting the boundary streets.

## PLAN OF SUBDIVISION.

After the topographic plan has been prepared the study of the location of streets, both in regard to the contours of the land, and the requirements of the surrounding streets of the municipality should be made, keeping in mind the size of lots for housing purposes. The lot, which we have found best suited to the requirements of the Act, is one having from 35 to 50 feet frontage with a depth of not less than 80 to 100 feet. With lots of this size, an acre of land will provide seven to eight lots with an allowance for open spaces. From the above it is evidently of great importance that the requirements of the block plans in regard to the location and orientation of houses be considered in the plan of subdivision.

This consideration has been accomplished in different ways, but, where the project has been of moderate size, the architects for the Commissions have been very successful in preparing both the plans of subdivision and the block plans, with the assistance of the municipal engineer, and with the general advice which we have been able to give them. In the larger projects, such as Lindenlea, in Ottawa, Hawkesbury, and Iroquois Falls, the area of the property and the problems involved made it necessary that they be handled by men with a knowledge of town planning. A study of these developments shows that many distinct economies have been effected by this forethought.

The most efficient method of securing the approval of the plans for a project has been for the architect, engineer or town planner for the Municipal Commission to present a study of their proposals in the form of a sketch, upon which, after the changes have been made, necessitated by our consideration, we have given preliminary approval. Their surveyors can then stake the lots without the danger that such changes will require re-staking. This procedure also allows the preparation of the finished plans, and the staking to proceed at the same time.

The best example that a commission has been able to attain, by proper planning, is the Lindenlea development in Ottawa, where a beautiful partly wooded property of 22 acres was purchased at \$3,000 per acre. From this, 168 lots, or 7.6 lots per acre, were secured, and 7.69 acres of the total property were dedicated to streets and open spaces. The judicious arrangement of this area for streets and open spaces enabled the commission to save intact a large part of the natural beauty of the site. The lots, thus obtained, sold at a price of 13 cents per square foot, or between \$425 and \$500 per lot in a municipality where double this price is more nearly an average than an exception.

Another example of such economy is the Sudbury Commission, which was able, by a resubdivision of a 43-acre tract, to eliminate unnecessary lanes and the wastefully shaped lots, caused by the diagonal cutting of a railway through a gridiron plan of subdivision. By this, 90 additional lots and 3.5 acres of park area were made available.

# WIDTH OF STREETS.

We have found that questions have arisen as to our requirements regarding the width of streets to be laid down on development plans. The words "street" and "street line" are commonly used on the one hand to denote the curb lines and the area between them, and on the other hand, the property lines and the area between them. Our understanding of a street is that property which is dedicated to the municipality for street purposes, and the street lines are the property lines between this dedication and the properties of other owners. The requirements of the Ontario Railway and Municipal Board is that the minimum width of this dedication shall be 66 feet. In the study of the subdivision and the block plan for the Housing Project, the street line may, therefore, be considered as a restriction line for the houses themselves.

In the parts of the development which obviously require streets of a secondary nature, and especially where the cost of the land is high, the houses may be placed up to the street line, as the distance of 66 feet between houses, such as are built under the Housing Act, is sufficient for light and air. Where a street is judged, with reasonable foresight, as a possible traffic street for the future, whether it is along the boundary of the property or, by necessity, is carried through it, the lots

fronting upon it should be made deeper and the houses upon the lots should be set back from the street line, in case an additional width of street is not dedicated, to allow for the possibility of a future widening if it is required.

# OPEN SPACES.

We have been pleased to see by the plans submitted to us for Housing Projects, that consideration has generally been given to provisions for open spaces such as parks, playgrounds and other recreational areas. Such open spaces are a necessity, which can be provided at less cost to the individual, if considered in the subdivision of the project, than is the case if the applicant is required to pay for them at some future time, through the tax rate, with the chance that they will not be so desirably located, and by not having use of them meanwhile.

The Trenton Commission made a point of considering for purchase two properties adjoining their largest park. The Ottawa Commission purchased the Lindenlea site as much for its natural beauty, which they were advised could be retained, as for other considerations. Ingersoll, Hawkesbury and Iroquois Falls, in their plans provided generous areas which were in themselves better suited for recreational and park purposes than for building. The plans prepared for the proposed projects of London and Sudbury have made provision for a like allowance.

# THE RELATION OF THE HOUSING PROJECT TO THE PLAN OF THE MUNICIPALITY.

We have found in the consideration of the Housing Projects, above mentioned, that, in the plans for projects of sufficient area to accommodate 100, 200 or 300 houses, that the proper planning has assisted greatly in improving unsatisfactory conditions which existed at the time of the inception of the project, such as: opening up streets which were blocked by unsubdivided tracts; widening other streets which were too narrow; diverting streets which had been laid down regardless of contours to locations where provisions for municipal utilities can be provided at less expense; providing diagonal streets; and by allotting park and playground areas to accommodate in a large measure the requirements of the population to be resident upon that area.

# IN CONCLUSION.

In the advice which we have given to the Housing Commissions by whom we have been consulted, we have endeavoured, by our analysis and by the discussions with the Commissioners from an outside point of view, to make our suggestions hold to the rigid line of making the house and lot purchased by the applicant of as great value as the conditions governing each case would permit.

In carrying out the above duties, we wish to thank the members of the Local Commissions, with whose problems we have been in touch, for the co-operation which they have given to us in our efforts to obtain results a little better than those resulting from the ordinary practice of building; and to mention the fact that the personnel of these Commissions are to be commended for the unselfish services which they are giving to their respective municipalities.

W. E. HARRIES and A. V. HALL, Town Planners.

# REPORT OF THE DEPARTMENT'S SANITARY ENGINEER.

In compliance with your request for a short article on matters relating to the Sanitation of Housing Schemes, I beg to submit the following observations:

One point which I think the Local Housing Commissions should have in mind is the importance of setting as good an example of housing sanitation and surroundings as is possible, because the influence and effect of a broad and generous interpretation of the functions developing upon such commissions will be extensive and permanent. House building is a most important local and national requirement that will tend to act as one of the antidotes to the unrest caused to some extent by the inadequacy of existing houses and the unhealthy overcrowding which occurs in them.

Another point is that sanitation should now be an essential. The home which it not sanitary in the best sense of the term is not really a home, and is liable to become a burden to the municipality in place of an asset. A home denotes a place of reasonable comfort and safety, but without pure and sufficient water supply, adequate means of refuse disposal and dry foundations, the qualities of comfort and safety are much reduced, although the house may otherwise be commodious and substantial.

It is, therefore, highly advisable that the Local Housing Commissions should insist upon a pure and sufficient supply of water for domestic and fire purposes. They should also urge that the new houses should have internal sanitary accommodations, sewer connections and dry foundations. In some instances water is available only by sinking wells, and sewage is disposable by building septic tanks and distributing tiles. When a number of houses are built on adjoining lots it is difficult to see how the purity of the water or the sanitary condition of the lots, especially in dense soil, can be properly safeguarded. Moreover, one of the proposed Provincial Board of Health regulations is that no tile sewage disposal system shall be within 150 feet of the source of any water supply, whether it be on the same or adjoining property. Wells and septic tanks should be at opposite ends of the lots. If this is not possible or the conditions are not favourable, then I consider an earth closet or other satisfactory sanitary accommodation should be located as far distant from the well as possible. The point which I desire to make is that new houses should, as far as possible, be located where municipal watermains and sewers are available, or are likely to be laid in the immediate future, and thereby enable the home builders to avoid the risks due to polluted wells and unsatisfactory private sewage disposal works.

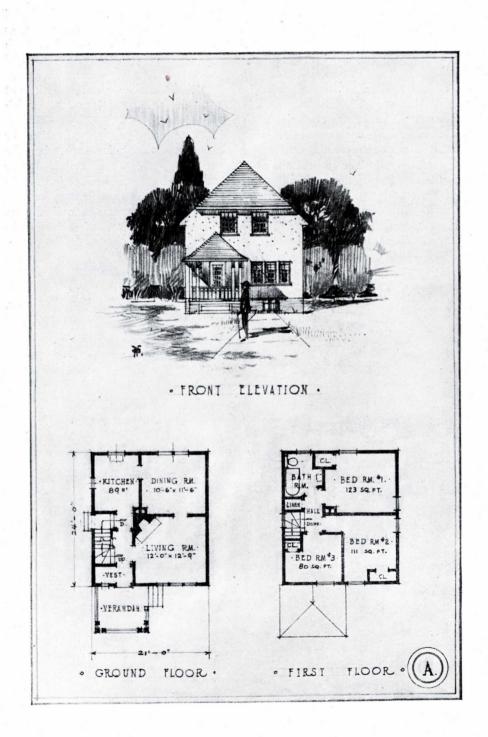
It is advantageous for efficient municipal administration to have compactly built up cities, towns and villages. If any city, town, or village spreads out unduly, the mileage of watermains, sewers, sidewalks and other municipal works must sooner or later be increased without adding much to the revenue, or the sanitary conditions may not be satisfactory. Furthermore, when sewers and watermains are extended, the houses have to be connected thereto and the wells and septic tanks have to be abandoned, and thus the cost of the housing scheme is increased.

It has been a gratifying feature of my inspections to find most of the Local Housing Commissions taking a keen interest in the development of housing schemes on the best lines. Their houses are located in good dry positions, provided with modern sanitary equipment and thus obtaining the best security to the municipal authorities. Some Commissioners, however, are not so whole-heartedly in favour of installing modern sanitary fittings, believing that the owner himself will put them in later on. This does not tend to establish the standard or asset which is fundamentally a function which the present opportunity affords.

I would advise that when Local Housing Commissions make application for approval of sites they might send you a sketch plan in triplicate, showing the location of the site, the dimensions and elevations, nature of soil and if dry or damp, the location of the nearest sewer, its size and elevation, the location of the nearest watermains and its size and pressure, width of street, whether the proposed house will have a N. S. E. or W. aspect, proposed location of well and its depth, and location of septic tank if any, and such other information as may be necessary to assist me in deciding whether approval can be recommended to you.

R. O. WYNNE ROBERTS.

Consulting Sanitary Engineer.



# DEPARTMENT'S STOCK DESIGN, "A."

#### Estimated Cost.

Frame, clapboard or stucco finish	\$2,850 00
Brick Veneer	3,200 00
Solid brick	3,450 00

#### Comments by the Architectural Department.

### PLAN "A."

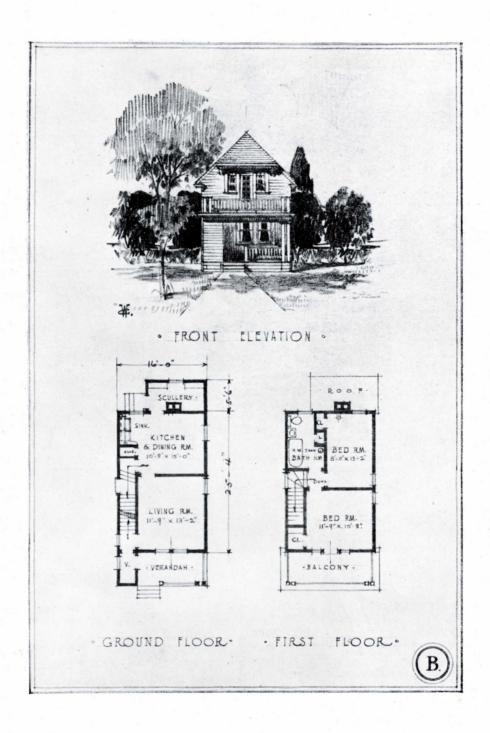
This is the Department's stock design containing six rooms and a bath and is laid out with the intention of showing the approximate minimum size of plan into which six rooms and a bathroom can be worked, adhering to the floor areas as set out in the Act.

This plan has not been constructed and it is, therefore, impossible to give an accurate price for which it could be built, particularly in view of the fact that the cost of building varies to such an extent in the different municipalities. Other plans almost similar, and with some slight modifications have been carried out and the estimates above are based on this data, which applies to the past year.

This design has the following advantages from the standpoint of low cost with the maximum amount of convenience:—

- (1) Verandah of ample size without obstructing the main window light of the living-room.
  - (2) Front vestibule containing ample space for hanging coats, etc.
    - (3) Front hall with waste space reduced to minimum.
- (4) The fireplace in the corner of the living-room leaves ample wall space for furniture, and in the event of the house being built of frame, the fact that the kitchen and furnace flues are built up together with the fireplace brick work makes for simpler construction and provides flues in such a position that they will draw much better than if placed on outside wall.
- (5) The position of the door leading from the kitchen to the grade entrance or to the cellar leaves the maximum amount of wall space for kitchen fittings, etc.
- (6) The grade entrance door at the side keeps dirty traffic to and from the cellar out of the kitchen.
- (7) The upstair hall area has been cut down to a minimum so much so that only enough wall space has been left to provide openings of the required size to the bedrooms, bathroom, linen closet and stairway.
- (8) Side windows in bedrooms No. 1 and No. 2 gives cross ventilation in these rooms.
  - (9) Bedroom and linen closets are of ample size.
- (10) Bathroom, kitchen and laundry plumbing fixtures can be economically connected to one soil stack with short branches, and space is available in bathroom for hot water tank, which would help to heat the room.
- (11) The position of the roof shown on the front elevation would mean that a small portion of sloping ceiling would show on the upper floor, continuing from front to rear on both sides of the plan.

 $\ensuremath{\mathsf{Note}}.\ensuremath{\mathsf{—See}}$  suggestion on separate sheet for layout of hot air heating system for this plan.



# DEPARTMENT'S STOCK DESIGN, "B."

#### Estimated Cost.

Frame, clapboard finish or stucco finish	\$2,400 0	<b>00</b>
Brick veneer	2,650 0	00
Solid brick	2,850	00

#### Comments by the Architectural Department.

#### PLAN "B."

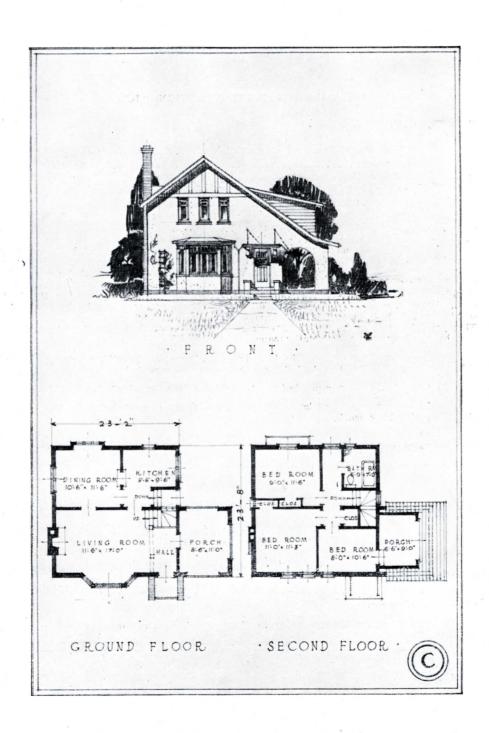
This is the Department's stock design containing four rooms and bath and is a suggestion for a very small house with the kitchen to be used as a combination kitchen and dining-room. Many families living in houses of much greater dimensions who use their kitchen as a dining-room, even when a separate dining-room is available, would not consider this arrangement an inconvenience. The scullery on the back of the house could be enlarged to the dimensions required for a kitchen by the owner in his spare time if he so desired. This would leave him with a separate dining-room. This provision for future extension makes this plan particularly worthy of consideration by working men with small means.

- (1) A sun-room opening off the back bedroom is another possible way of extending this plan after the kitchen is built on the rear, as suggested.
  - (2) Cross ventilation and clothes closets have been provided for both bedrooms.
- (3) The arrangement of bathroom fixtures directly over the sink in the kitchen simplifies plumbing work.
- (4) Linen closet opens off bathroom. Space permits location of domestic hot-water tank in bathroom if desired.

Other points of convenience are as follows:-

- (a) A front vestibule and coat hanging space are provided.
- (b) A grade entrance at the side gives access to the kitchen and cellar from the outside.
  - (c) A small broom closet is provided off the kitchen for brooms, pails, etc.
- (d) The upstair front balcony could be utilized as a sleeping porch in the summertime if desired and would only entail a small outlay of money to provide the necessary enclosing awnings and pipe supports.
- (e) The darkening effect of front verandah on living-room is offset by additional window in side wall.

Note.—See suggestion on separate sheet for layout of hot-air heating system for this plan.



# BRANTFORD TOWNSHIP, "C."

Owner and Architect, F. W. Nicholls. Hollow tile and stucco.

Cost, \$4,000.00. Loan, \$3,000.00.

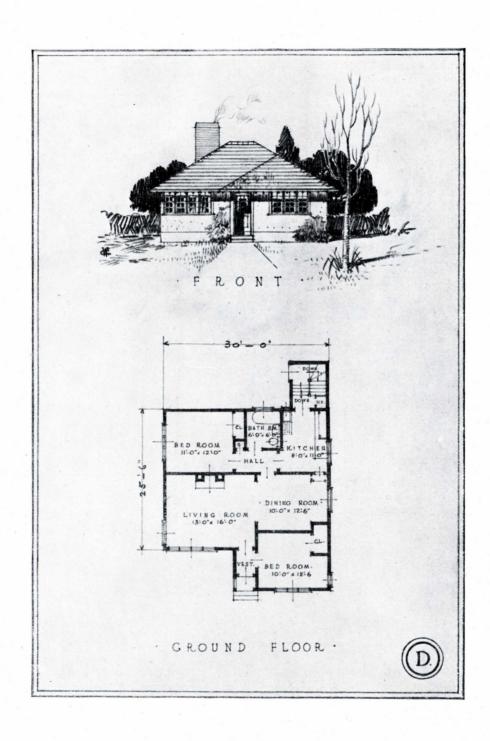
Comments by the Architectural Department.

PLAN "C."

This is a house containing six rooms, sleeping porch and bathroom, planned by an architect for his own use, and is a very striking example of making a house which is really quite small in plan appear large in elevation by using the same materials for the porch as for the main building and continuing the structural lines. The dormer effect obtained in the sleeping porch over is excellent when compared with the excrescences so often stuck on to small houses.

Some improvements to this plan might be considered as follows, viz.:-

- (a) Front vestibule and coat room.
- (b) The upstair hall, which is shown running through to the back wall, could have been shortened, providing an additional closet off the back room and a linen room off the hall. This would have left the closet shown opening off the hall for the use of the occupants of the small front bedroom.
  - (c) Cross ventilation for bedrooms.



# PORT ARTHUR, "D."

Owner and Architect, Capt. H. E. Lloyd Owen. Frame, stucco finish.

Cost, \$3,000.00 and owner paid \$300.00 for extras. Loan, \$3,000.00.

Comments by the Architectural Department.

#### PLAN "D."

A one-storey bungalow containing five rooms and a bathroom. This would make a very attractive house for a couple with no family and the position of the front bedroom off the vestibule would make it possible for separate rental if so desired.

If the question of taking in a lodger was not considered, the door to the front bedroom would be better if made to open directly into the living room.

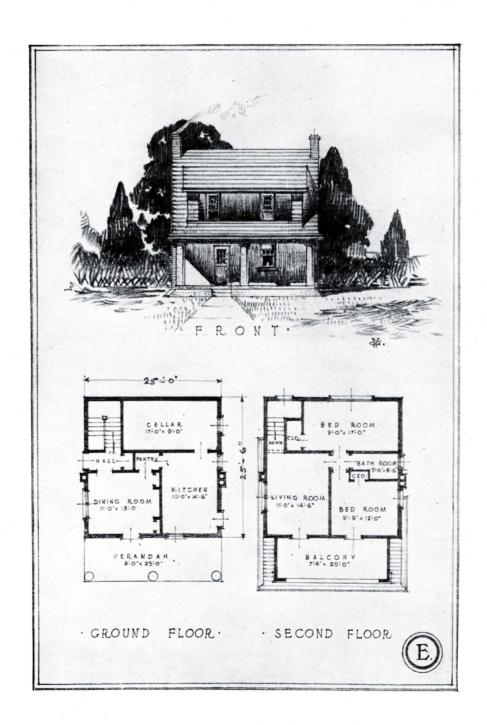
By arranging the front entrance door at the side of the vestibule it would have been possible to provide some coat hanging space.

In an ideal plan of this type, of course, both bedrooms and the bathroom should be off a common hall.

An improvement could also have been made to this plan by shifting the stair enclosure at the back so that another window could be worked in at the end of the kitchen to permit cross ventilation.

A small window in the rear of the back bedroom would improve the ventilation.

In this case the owner has wisely refrained from imagining that his house was being built in California, and has not used the loan for a porch which can only be used for a very short time each year in his district.



#### BRANTFORD, "E."

Owner, V. Coleman.

Architect, F. W. Nicholls.

Cement blocks, stucco finish.

Cost, \$3,000.00. Loan, \$2,200.00.

Comments by the Architectural Department.

# PLAN "E."

This is a rather singular plan laid out to suit a decided rise in the grade which occurs at the back of the house. For this reason the rear portion of the ground floor works in as a cellar. The remainder of the ground floor is utilized for the dining room and kitchen, the latter having a separate entrance from the outside.

The stairs leading from this floor land in the living room above which has a very desirable balcony opening off it on the front.

The two bedrooms and the bathroom all open into a small common hall, which is a good feature.

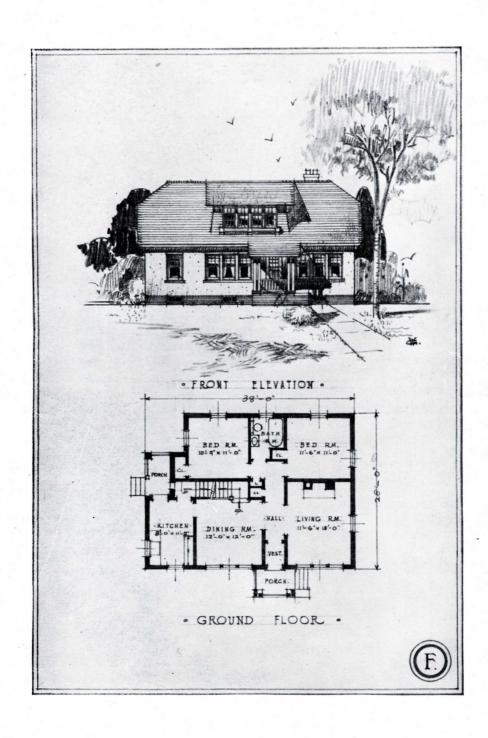
A small side window to provide cross ventilation for the back bedroom would have been an added improvement.

The heating of this house will present difficulties not found in ordinary types. Hot air heating of ground floor front rooms for example, will be difficult. With a hot water system the cellar floor level would require to be dropped sufficiently below the ground floor level to obtain the necessary rise to the pipes leading to the radiators.

The damp proofing which would be required under the ground floor would add quite an item to the cost.

It would appear that the outside door to kitchen might have been combined with a door to cellar in such a way as to improve traffic lines and give winter protection to kitchen.

The appearance of house in front would have been greatly improved if four columns had been used instead of three. The use of centre support in an opening should be avoided.



#### WINDSOR, "F."

Owner, Mitchell.
Architect, Beaton.
Hollow tile and stucco.

Cost, \$4,000.00. Loan, 4,000.00.

Comments by the Architectural Department.

# PLAN "F."

This, unlike most of the one-storey bungalow plans, shows a hall through the centre of the house, the dining room on one side and living room on the other.

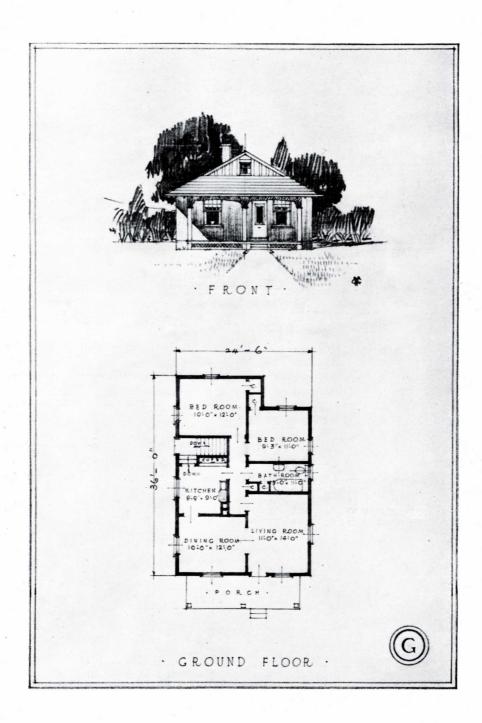
A stairway has been shown leading to the attic, which will provide for future extension in the way of bedrooms.

The kitchen and both the bedrooms are in a good position to get cross ventilation, which has been provided as shown.

Means could have been provided to get to and from the cellar from the outside without passing through the kitchen, and additional wall space in kitchen obtained by doing so.

If a gas, coal or wood burning stove is desired in the kitchen, a flue should be provided.

This house stands on a corner lot and particular attention has been given to the sunlight provisions in the principal rooms in winter time.



# SANDWICH EAST TOWNSHIP, "G."

Owner, Geo. Thorburn. Architects, Colthurst, Tracy & Kohlmorgan. Hollow tile.

Cost, \$3,450.00. Loan, \$3,450.00.

Comments by the Architectural Department.

## PLAN "G."

This is a very good layout of a one-storey five-roomed bungalow and has the advantage of having a hall which is common to the two bedrooms, the bathroom and the kitchen.

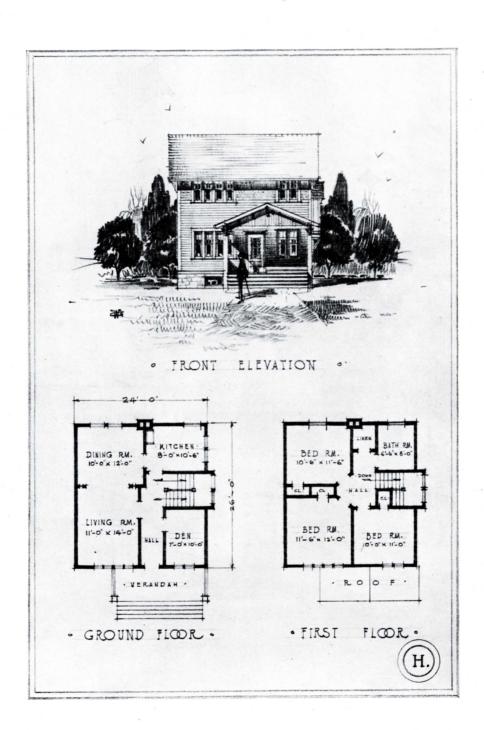
A grade entrance at the side gives entrance to the kitchen and outside cellar entrance without having to pass through other parts of the house.

Cross ventilation has been provided for all rooms except the kitchen. This is unfortunate as the kitchen would be the hardest room to ventilate in the summertime and it should be the easiest.

This difficulty would be increased in most municipalities by the location of buildings on adjacent lot, and this plan, therefore, should not be used except where the foregoing objections have been overcome.

The necessary vestibule and coat room space should be provided at the front entrance.

The centre support in porch is not satisfactory in appearance.



# SAULT STE. MARIE, "H."

Owner, L. Goyette.

Frame clapboard finish to upper window sills, shingled above.

Cost, \$3,000.00. Loan, \$3,000.00.

Comments by the Architectural Department.

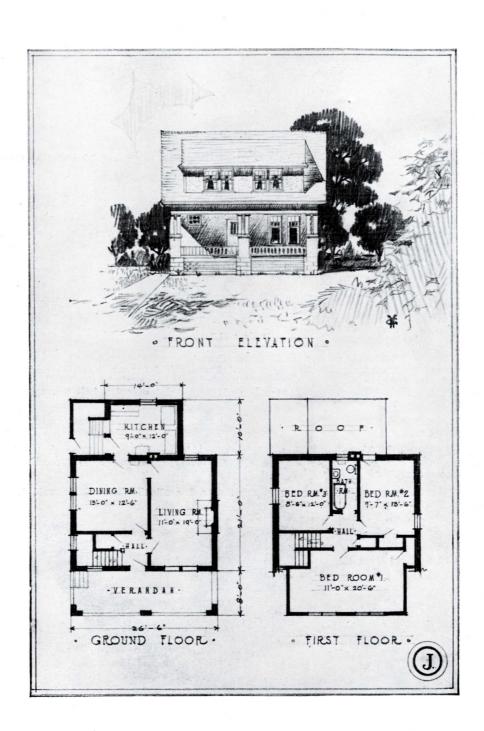
# PLAN "H."

The over-all size of this house is larger than is required to get the areas of the rooms on the first floor according to the minimum called for under the Act. These over-all dimensions were likely determined by the desire to work in the small den on the ground floor. This, however, necessitated quite a lot of extra hall space to get past the den to the main stairway.

The front vestibule and the necessary coat hanging space should have been included in this plan.

A side entrance door should also have vestibule protection. A door at the top of the stairs leading down to the grade level would provide vestibule protection at side entrance door.

Small side windows to give cross ventilation for all the bedrooms should have been provided.



## OSHAWA, "J."

Owner and Architect, J. M. Brant. Hollow concrete wall.

Cost, \$3,800.00. Loan, \$3,000.00.

Comments by the Architectural Department.

#### PLAN "J."

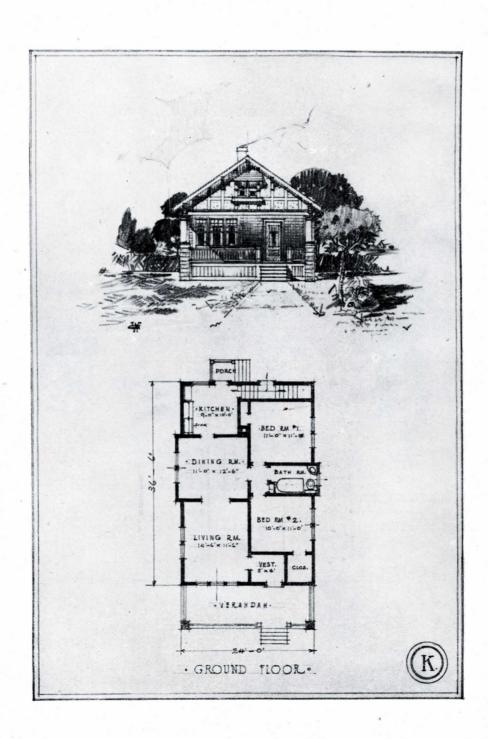
This is an example of a six-roomed house built by an architect for his own use. The walls have been shown solid for the purpose of more clearly defining the lines of the plan on the illustration, but were built of poured concrete with a continuous air space through the centre.

The outer and inner thicknesses of concrete are bonded together by small steel rods.

An improvement could have been made to this plan by the provision of a vestibule for the front entrance and means for getting cross ventilation in the kitchen and some of the upstairs bedrooms.

The appearance of this house in general is much more interesting than the straight front elevation indicates. The wing at the back is combined with the main building so that the perspective from the roadway is very satisfactory. Here again it is desirable to point out the unfortunate results which follow the introduction of column supports in the centre of an opening. This applies especially here, where a dormer window is carried over the line of the columns below.

The roof of kitchen and the floor of the front bedroom will demand insulation not required of plans where the upper floor rooms are placed directly over the ground floor.



# WINDSOR, "K."

Owner, W. Logan. Architect, S. Keyser. Frame, clapboard finish.

Cost, \$3,000.00. Loan, \$3,000.00.

Comments by the Architectural Department.

# PLAN "K."

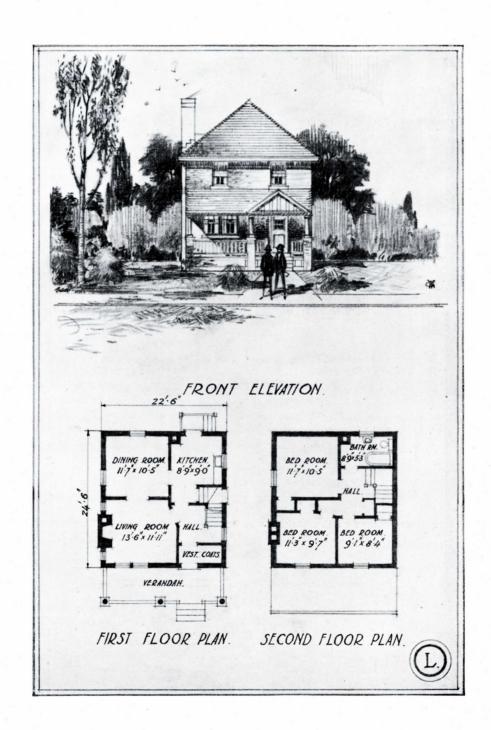
This is another three-room deep type of plan which is only suitable for very wide lots when so many of the rooms depend on getting light from the side.

On the average city lot, houses on the adjoining lots practically exclude all sunlight and ventilation from all the rooms shown with windows placed in the side walls.

Cross ventilation cannot be provided in bedrooms. In the kitchen where it is most needed, it could have been got quite easily in this case.

More wall space in the kitchen could have been obtained by omitting the door leading to the rear porch, as a grade entrance to cellar and kitchen is otherwise provided. If the rear stairs to the basement were placed differently, bedroom No. 1 could then get its daylight through the rear wall and a small window on the side would give the necessary cross ventilation.

If it is desired to use the attic space for storage a stairway to get to it could be built over stairs shown at the back of the house, with the door leading out of bedroom No. 1.



# NEW TORONTO, "L."

Owner, J. Griffith. Architect, J. Jackson. Solid brick.

Cost, \$4,000.00. Loan, \$3,000.00.

Comments by the Architectural Department.

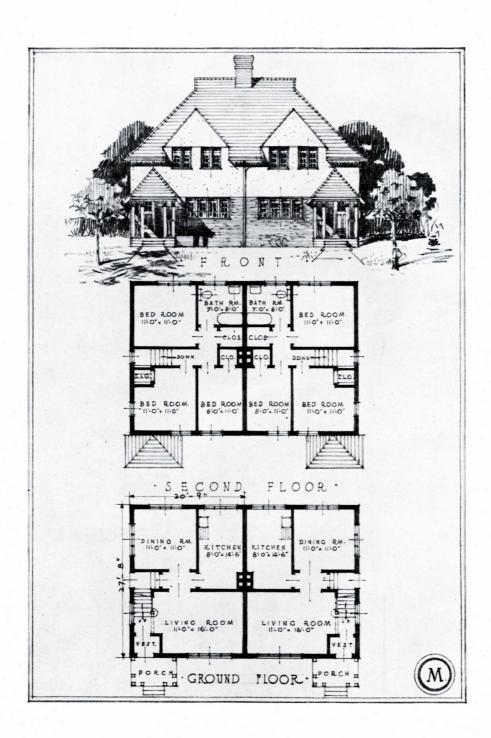
PLAN "L."

This presents the typical six-roomed square planned house.

Omission of rear door would increase kitchen wall space, as a grade entrance has already been provided leading from the kitchen at the side.

The upstair floor plan shows rather a large amount of hall space which could be cut down if it is desired to economize in space. A right angle turn with winders at the foot of main stairs would have allowed an increase of about three feet in the length of the kitchen.

Cross ventilation should have been provided for all the bedrooms, and where one window in a bedroom is all that is to be built it is desirable that it should be placed so that it is never liable to obstruction by buildings when may be erected on adjacent property.



### MIMICO, "M."

Type of house proposed to be erected at Mimico. Architect, Harold R. Watson. Ground floor brick, upper floor stucco and hollow tile.

Estimated cost, \$3,175.00 per house.

Comments by the Architectural Department.

# PLAN "M."

At Mimico the erection of about 40 houses is contemplated and tenders for these were taken last October.

The accompanying illustration gives a general idea of the type of house proposed, and the contract price given above includes a house complete in every respect with all the necessary grading, sodding and fencing.

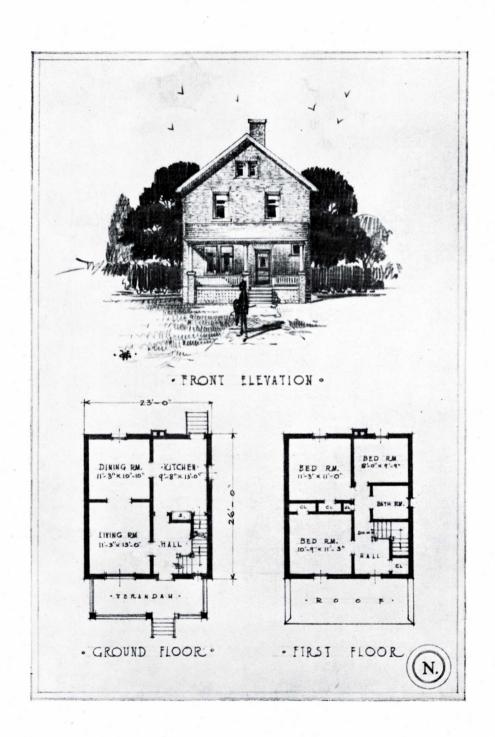
At very small extra cost a fireplace could have been provided in the angle of each of the living rooms.

In the bathroom the reversal of the positions of the w.c. and the basin would have brought the two soil stacks together and simplified drainage below.

The low eaves, high pitch of roof, and grouped flues, add very much to the attractive appearance of these houses, and the contract figures given would indicate that the difference between cost of dormers and extra wall height cannot be a serious factor against this scheme.

Attention is here drawn to the possibilities of economizing with semi-detached houses without interfering with other general desirable conditions.

The same of the



# OSHAWA, "N."

Oshawa Housing Commission, stock design No. 1. Architect, J. M. Brant. Brick veneer.

Cost, \$3,000.00.

Comments by the Architectural Department.

#### PLAN "N."

This stock design has been repeated quite a number of times by the Commission at Oshawa and is very good value for the cost given above.

Over-all sizes of the plan could be slightly reduced and the areas and the rooms still be according to the minimum requirements of the Act.

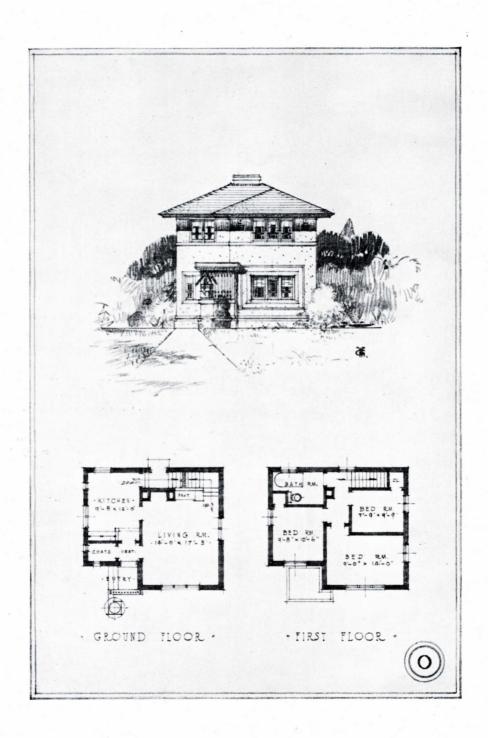
There is quite a lot of waste hall space on both floors, and neither front nor rear entrances have vestibule protection.

More wall space could be obtained in the kitchen if the rear door was omitted and a grade entrance door worked in at the side under the main stairs, which is also required to give direct entrance to cellar.

The question of cross ventilation has been totally ignored.

The front elevation of this design is of a very commonplace character, and a great deal of care and study are required to see that the proper variation is given to the design where it is to be reproduced more than once in the same row. The arrangement of porch columns needs re-study to do away with the centre support.

The lighting of the living room is seriously interfered with by the roof of the unnecessarily large verandah.



#### OTTAWA, "O."

Owner and Architect, F. C. Sullivan. Hollow tile and stucco.

Cost, \$4,000.00 and owner paid \$400.00 for extra work and special finish. Loan, \$4,000.00.

Comments by the Architectural Department..

#### PLAN "0."

This is a very attractive home erected by an architect for his own use, and is laid out with the idea of using the living room as a dining room if occasion demands.

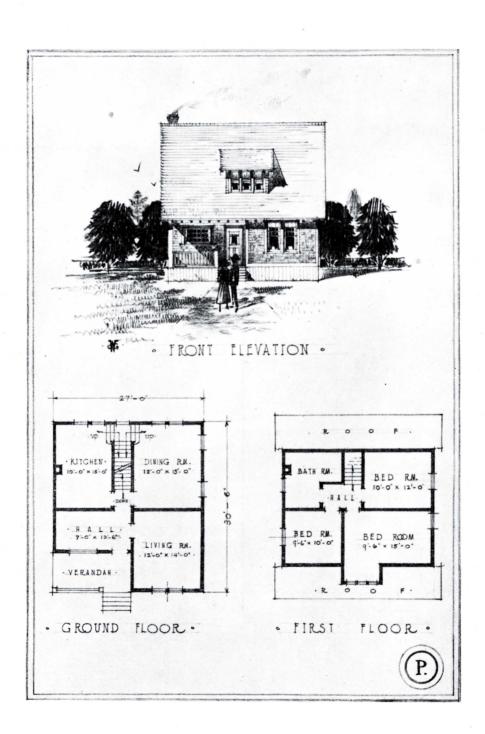
It is quite likely that the average person wishing to adopt this plan would ask for a verandah instead of the small entrance motif shown.

It will be observed that cross ventilation has been provided where possible namely, living room, kitchen and two bedrooms.

A clothes closet should have been provided for the largest bedroom.

Separate flues should be provided for the furnace and the kitchen stove.

The grade entrance to the cellar or to the kitchen, and the front vestibule with its ample coat space are very desirable features.



#### SAULT STE. MARIE, "P."

Owner, Fred Gibson. Frame construction, shingles.

Cost, \$3,200.00, including hot-water heating.

Comments by the Architectural Department..

# PLAN "P."

This plan is much larger in area than is needed to meet the requirements of the  $\operatorname{Act}$ .

The large area of the front hall is entirely unnecessary in a small house.

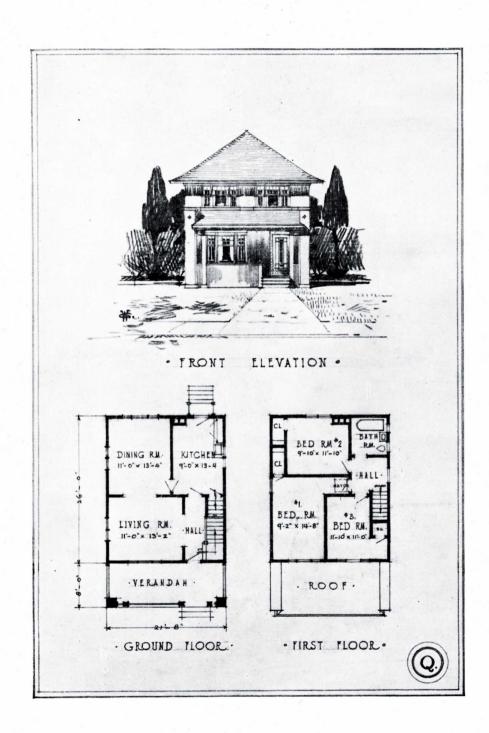
This plan lacks means to get from the outside to the cellar without passing through the house.

The area of the bathroom shown on the first floor is very wasteful.

Windows to get cross ventilation in the back bedroom and the small front bedroom would necessitate the building of extra dormers, which, if provided, would add to the cost.

The absence of closets in bedrooms is a serious omission which should not be overlooked by any Commission.

4.36



### NIAGARA FALLS, "Q."

Owner, F. E. Brooker. Architect, A. E. Nicholson. Frame, stucco finish.

Cost, \$3,000.00 and owner paid \$300.00 for extras. Loan, \$3,000.00.

Comments by the Architectural Department..

PLAN "Q."

This is a square plan which differs very little from the average type. The depth of the plan could, of course, be cut down slightly without violation of the requirements.

Improvements recommended:-

Grade entrance to cellar and kitchen combined.

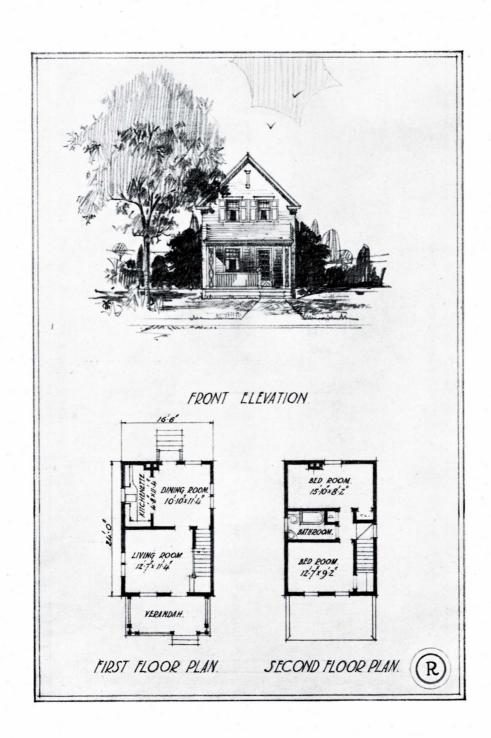
A window in place of rear door to kitchen.

More wall space in the kitchen, by moving the door from the kitchen to the hall three feet nearer to the front door and the door to the cellar stairs worked in on the side and the stairs starting off with winders to get to the cellar somewhat similar to the layout suggested on the Department's stock design "A."

A front vestibule.

Part of wall space upstairs to be used as linen closet.

The closet shown for bedroom No. 3 would have to enclose a bulkhead to get the required headroom for front stairs.



## MERRITTON, "R."

Owner, A. Watson.
Architect, A. E. Nicholson.
Frame, clapboard finish.

Cost, \$2,565.00. Loan, \$2,500.00.

Comments by the Architectural Department..

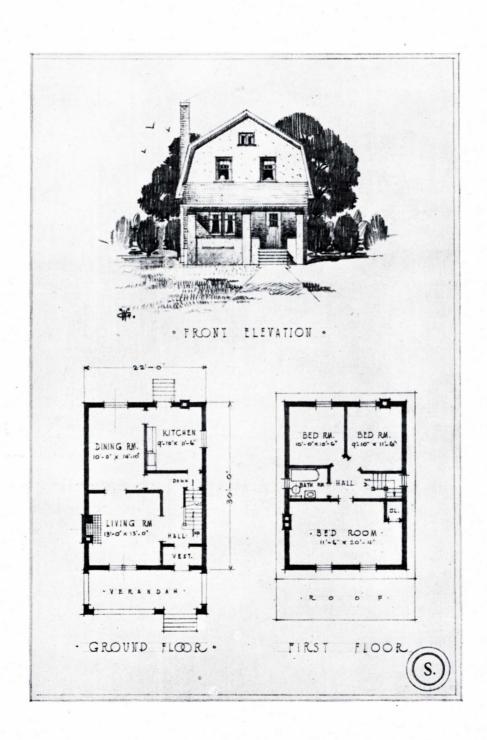
PLAN "R."

This is a very good plan for a small narrow house.

More wall space could have been preserved in the kitchen if the rear door had been omitted and a grade entrance door at the side under the main stairway provided.

Small side windows in both the bedrooms should have been provided to give cross ventilation.

A front vestibule with coat hanging space is a greater necessity than the large verandah shown.



# OTTAWA, "S."

Owner, John C. Cowan.

First storey solid brick, upper storey hollow tile, stucco finish.

Cost, \$4,000.00, and owner paid \$100.00 extra for furnace. Loan, \$4,000.00.

Comments by the Architectural Department.

#### PLAN "S."

This example of the square plan is much larger than is needed to get the areas of the rooms according to the requirements of the Act.

It has no grade entrance to cellar.

There is much waste hall space.

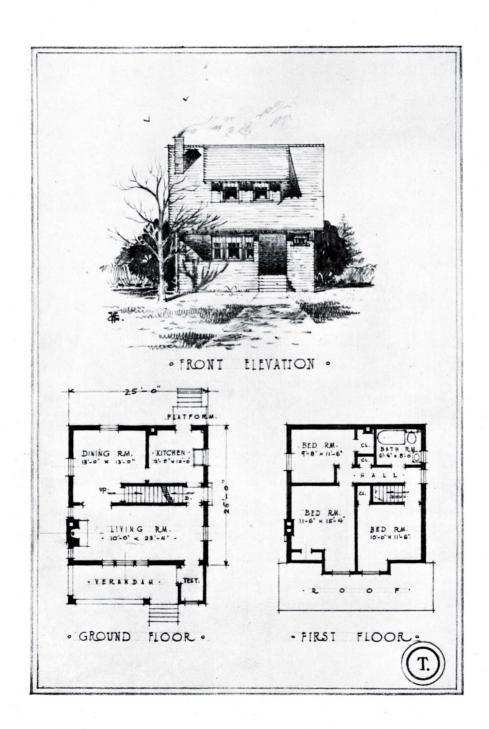
The door from the kitchen to the front hall is also badly placed as it prevents furniture from being placed along the side walls for the length of about  $3\frac{1}{2}$  feet.

No clothes closets for two rear bedrooms are shown.

Note omission of side windows to provide cross ventilation for all the bedrooms.

Bathroom plumbing is not over kitchen fixtures for the most economical layout of plumbing pipes, and the location of bathroom over dining room and living room is not the most desirable.

The cost of this house could easily be kept within the limits of the Act by making some reduction in area without sacrifice in general effect.



# SAULT STE. MARIE, "T."

Owner, T. Lynott.

Frame constructed, double sheeted and brick veneered.

Cost, \$3,400.00.

Comments by the Architectural Department.

PLAN "T."

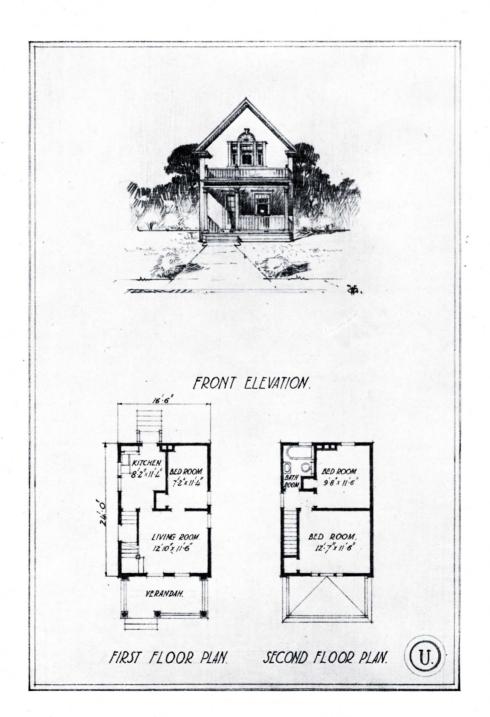
This plan is slightly larger than is required to comply with the regulations.

The living room is accountable for the extra size of the plan and should be reduced where low cost housing is desired. This room is too narrow, and this was only permitted because of the area.

Side windows to give cross ventilation for bedrooms should have been provided.

The rear entrance door to kitchen is quite unnecessary and costly.

In other respects this house has some uncommon and desirable features and deserves study.



### INGERSOLL, "U."

Owner, G. Davies. Architect, A. E. Nicholson. Frame, clapboard finish.

Cost, \$2,365.00. Loan, \$2,200.00.

Comments by the Architectural Department.

PLAN "U."

This shows another small house adaptable to narrow lots.

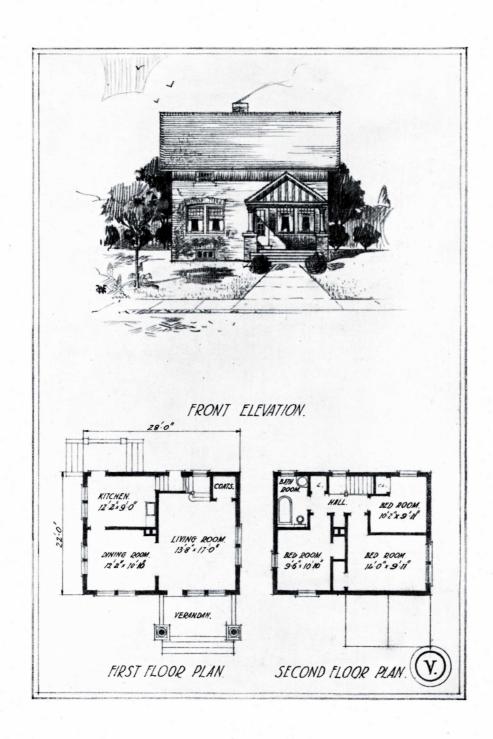
The idea of placing one of the bedrooms on the ground floor gives the advantage of a third bedroom in a plan of much smaller dimensions than would be required if all three bedrooms were on the upper floor as is usually the case.

The door at the rear of the kitchen could have been omitted as access has already

been provided at the side grade entrance.

The living room in this plan would serve as a combination living room and dining room if desirable.

This plan lacks the necessary front vestibule accommodation and coat space, which could easily take the place of the costly verandah construction. It also lacks the side windows necessary for cross ventilation in the bedrooms.



### LEAMINGTON, "V."

Owner, Miss N. B. Chamberlain. Architect, A. S. Corlett. Solid brick.

Cost, \$3,900.00. Loan, \$3,000.00.

Comments by the Architectural Department.

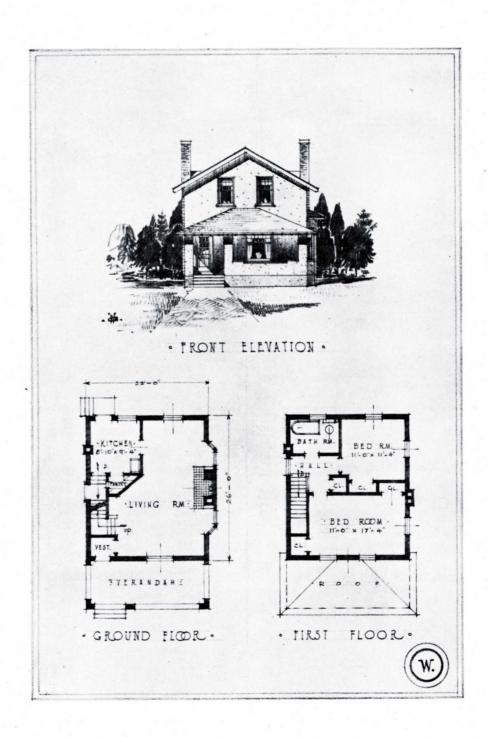
PLAN " V."

This plan as shown would only be adaptable to very wide lots, as it requires considerable side clearances for windows in addition to the frontage demanded for the house itself.

The necessary front vestibule and coat room accommodation should be provided at the front door as it is not desirable to cross the living room with wet clothing, rubbers, etc., to get to the cloak room located off the living room back of the stairway.

The rear entrance door to the kitchen could have been eliminated to give more wall space, as the grade entrance door at the rear would serve as an entrance to the kitchen as well as to the cellar. This would also eliminate cost of outside steps shown.

Extra windows should have been provided to allow cross ventilation in the kitchen and the two bedrooms at the right hand side of the building.



### SAULT STE. MARIE, "W,"

Owner, John Munnoch. Architect, Thos. R. Wilks. Frame, stucco finish.

Cost, \$3,000.00. Loan, \$3,000.00.

Comments by the Architectural Department.

PLAN "W."

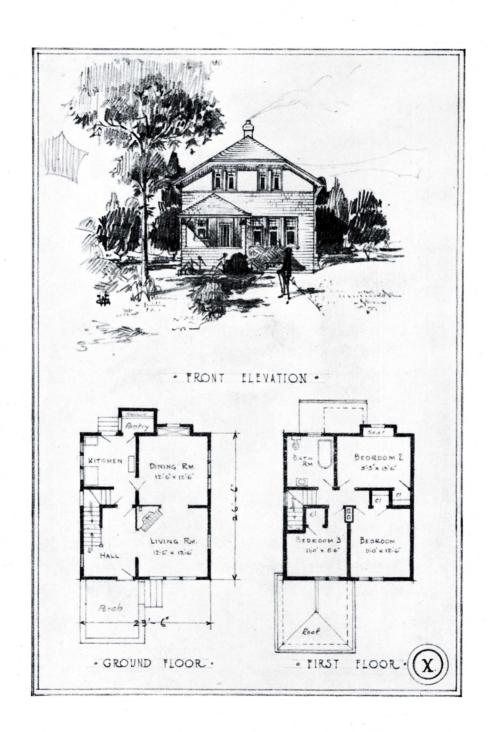
It has clearly been the intention of the owner of this house to have as much of the ground floor devoted to combination living room and dining room as possible.

The rear door to kitchen is not necessary.

A small window in the side wall of the kitchen would improve ventilation.

The over-all size of this plan, namely, 22 ft. by 26 ft., would have given ample area on the upper floor for three bedrooms according to the sizes called for under the Act.

The shape of the living room might be criticized by some clients but properly treated it could be made very attractive. Windows on either side of the fireplace do not make the most comfortable appearing fireplace, nor the most comfortable in actual practice as a certain amount of draught is always to be expected around window openings, even when they are closed.



## WOODSTOCK, "X."

Owner, P. C. Canfield.

Architects, Watt & Blackwell.

Frame construction, with first storey shingled and second storey stuccoed.

Cost, \$3,000.00 and \$300.00 extra work done by owner. Loan, \$3,000.00.

Comments by the Architectural Department.

## PLAN "X."

This illustrates a typical example of the square plan and is somewhat larger than is actually required to obtain the minimum areas for rooms as called for under the Act.

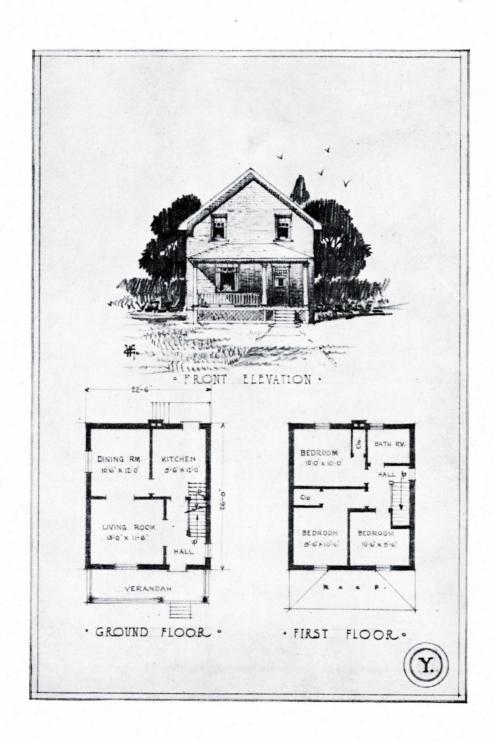
Some of the waste hall space on the ground floor should have been used to provide the necessary coat and vestibule space.

The side entrance door makes the rear door unnecessary.

The bathroom is larger than should be provided for houses of low cost.

Small windows at the sides of the bedrooms could have been worked in just below the eaves for cross ventilation.

The lighting of kitchen and dining room with windows on opposite sides of the house would make this plan unsuited to the average sized lot.



## SUDBURY, "Y."

Sudbury Housing Commission, Plan No. 1. Owner, D. Burbridge. Brick veneer.

Cost (approximate), \$3,000.00. Loan, \$3,000.00.

Comments by the Architectural Department.

## PLAN "Y."

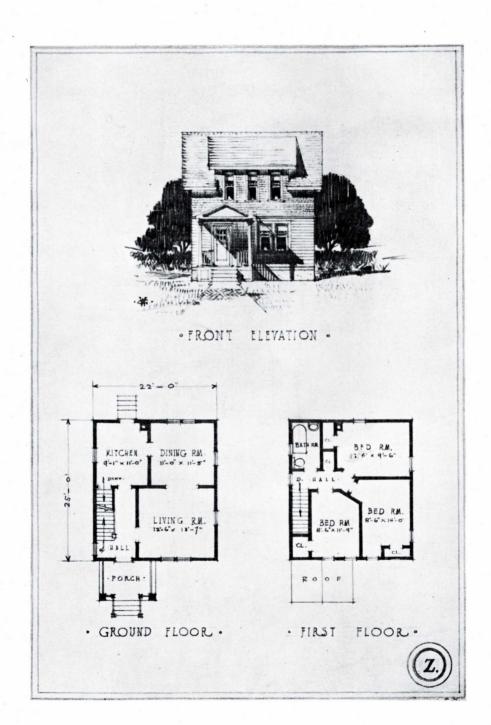
This is another example of the square planned type of the six-roomed house and lacks the necessary front vestibule and coat room accommodation, also the grade entrance door which would give outside entrance to the cellar and entrance to the kitchen. The rear entrance door to the kitchen could then be done away with to provide more wall space for the fittings.

See the Department's stock design "A" for suggestion of turning the entrance to the cellar sideways to get extra wall space in the kitchen.

Windows should be placed in both outside walls of kitchen for cross ventilation.

Small windows should be placed in the side walls of the bedrooms to permit cross ventilation.

When comparing this plan with the Department's stock design "A" it will be noticed that the outside dimensions of this house are a little larger than is necessary to get the areas of the rooms according to the minimum requirements of the Act.



### MIDLAND, "Z."

Stock design, "The Simcoe."

Cost:

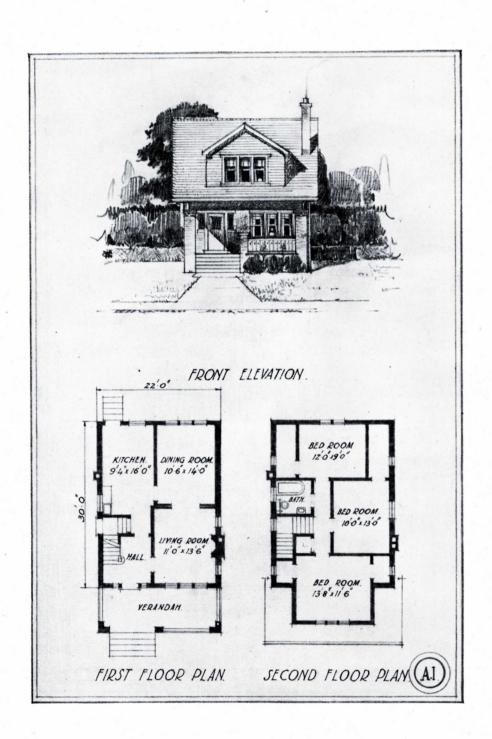
Comments by the Architectural Department.

### PLAN "Z."

This is another example of the typical square planned six-roomed house, but lacks the necessary front vestibule and coat-room accommodation and the grade entrance at the side which would give outside entrance to the cellar. If a grade entrance door was provided at the side, the rear kitchen door could have been done away with, which would leave more available wall space for placing kitchen fittings.

A fireplace could have been worked in the back corner of the living-room so that the flue from the kitchen, living-room fireplace and furnace could have been carried up in the one chimney stack.

If the door leading from the kitchen to the cellar was turned sideways, as suggested on the Department's plan "A," this would leave still more available wall space in the kitchen.



#### HAMILTON, "A1."

Owner, J. P. Hemmer. Solid brick.

Cost, \$3,850.00. Loan, \$3,850.00.

Comments by the Architectural Department.

PLAN "A1."

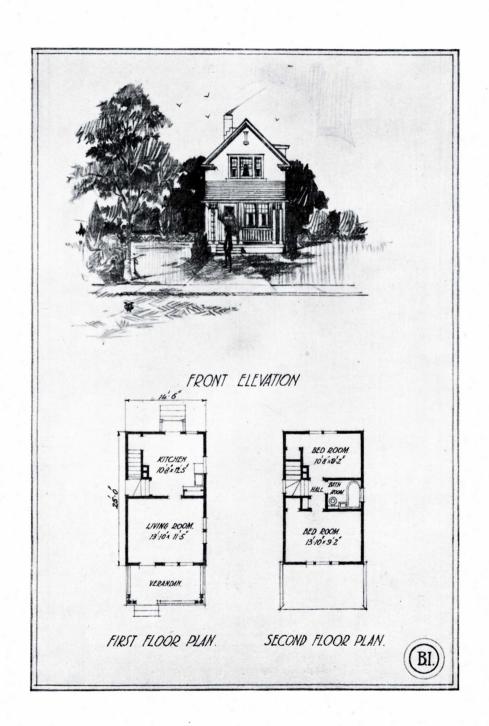
This is a very good example of obtaining a square planned house of rather large dimensions at a reasonably low cost in solid construction.

A front vestibule and the necessary coat hanging space should have been provided.

The door in the rear wall of the kitchen could have been done away with, considering that an outside grade entrance has already been provided at the side. This change would give just that much more available wall space for kitchen furniture.

It would be very difficult with this kind of a layout to provide satisfactory cross ventilation for any of the bedrooms.

The bedroom floor extending over exposed verandah would require careful insulation.



ST. CATHARINES, "B1."

Architect, A. E. Nicholson.

Estimated Cost, \$2,200.00.

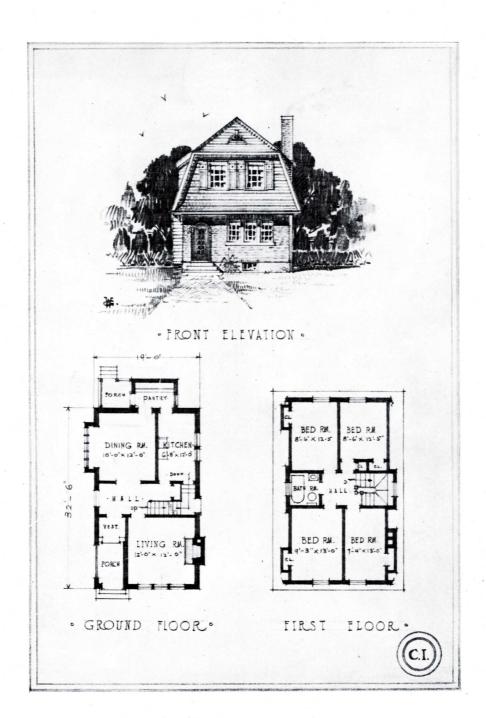
Comments by the Architectural Department.

PLAN "B1."

This plan is particularly adaptable to narrow lots and follows the lines, in a general way, of another plan by the same architect.

A front vestibule, however, has not been provided and the arrangement of the stairs to the upper floor being only accessible from the kitchen might detract from the popularity of the scheme.

Cross ventilation should have been provided for both bedrooms. Two outside doors from kitchen reduce wall space unnecessarily.



OTTAWA, "C1."

Owner, H. W. Merrill. Brick veneer.

Cost, \$3,400.00. Loan, \$3,000.00.

Comments by the Architectural Department.

PLAN "C1."

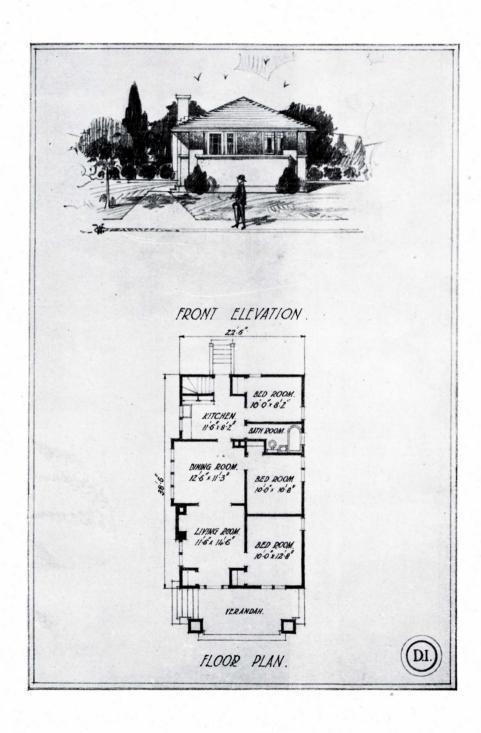
This illustrates a seven-roomed house of the cross hall type with four bedrooms on the upper floor.

Quite a lot of waste hall space exists on the ground floor which could have been utilized in making the kitchen the proper size. As it is now, it is really only a kitchenette helped out by an extra pantry at the rear.

Side windows to give the necessary cross ventilation in all the bedrooms have not been provided, as each extra window would necessitate the building of a dormer where a roof of this character is used.

The location of bathroom over front entrance hall is not satisfactory for plumbing.

Side lighting only for kitchen and dining room would not be satisfactory if liable to obstruction by adjacent houses.



## ST. CATHARINES, "D1."

Owner, E. Hare. Architect, A. E. Nicholson. Frame, clapboard finish, Plan No. 611.

Cost, \$3,000.00. Loan, \$3,000.00.

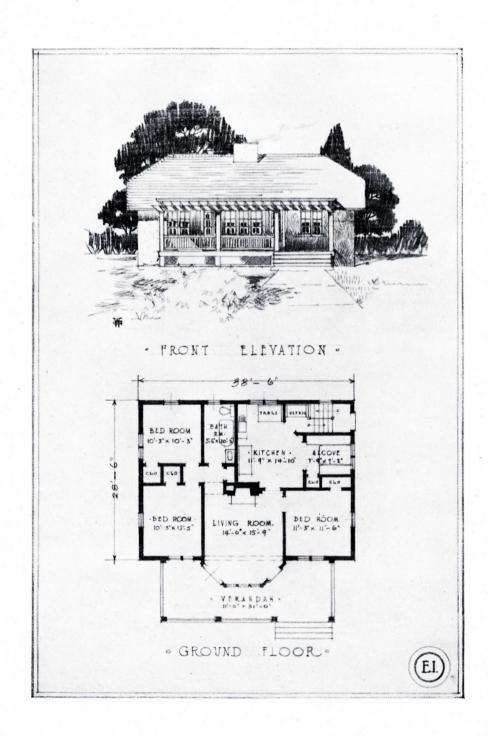
Comments by the Architectural Department.

PLAN "D1."

This is one of the three-room deep types of plan which is only suitable for very wide lots when so many of the rooms have to depend on getting their light from the side.

The position of the bathroom opening directly off the kitchen is distinctly bad and an improvement could have been made to the plan by providing a small common hall to serve the two rear bedrooms and bathroom.

Front entrance vestibule protection is omitted.



### PORT CREDIT, "E1."

Owner, D. C. Richardson. Architect, W. F. Sparling Co. Solid brick.

Cost, \$3,900.00. Loan, \$3,500.00.

Comments by the Architectural Department.

PLAN "E1."

This plan shows quite a number of good features which are as follows:—

The two bedrooms on the left hand side of the house open off a small separate hall which is also common to the bathroom and a small linen closet.

The bathroom and the kitchen are immediately adjoining which would tend to simplify the plumbing layout.

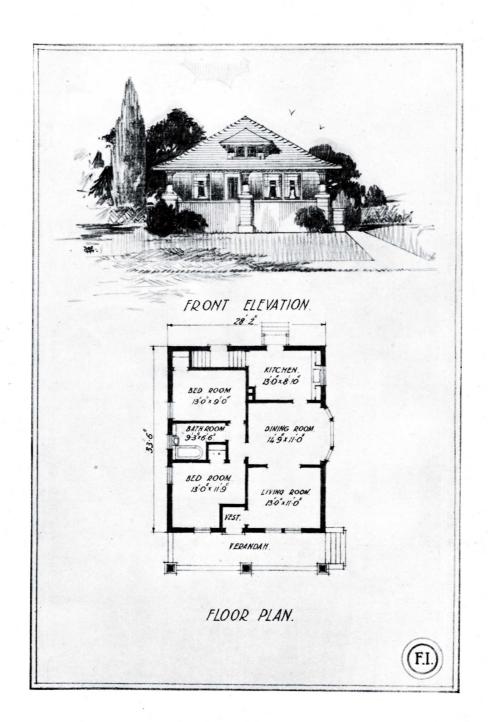
The flues for the furnace, living room fireplace, and kitchen stove can be run up in the one chimney stack.

The small dining alcove off the kitchen is excellent.

Means have been provided to get to and from the cellar from the outside without passing through the kitchen.

Cross ventilation has been provided for all bedrooms.

A rather unfortunate point in this plan is the fact that the verandah practically shuts all sunlight out of the living room. This could easily be overcome by keeping the verandah roof down as low as possible and raising a low dormer above, which would let sunlight directly into living room. This would not add much to the cost and might be made a very attractive feature of the room.



# MERRITTON, "F1."

Owner, J. O. Fawell. Architect, A. E. Nicholson. Frame, clapboard finish.

Cost, \$2,550.00. Loan, \$2,500.00.

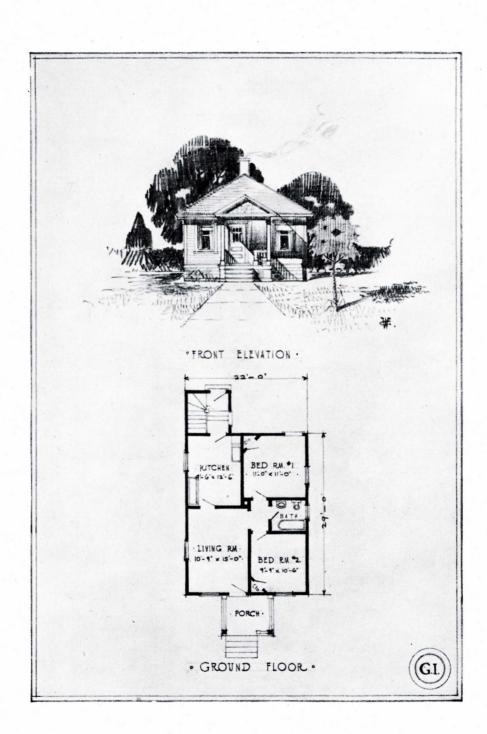
Comments by the Architectural Department.

PLAN "F1."

This is a one-storey bungalow of five rooms and a bathroom on one floor. The arrangement of bedrooms and bathroom opening off a common hall is good and the kitchen is so placed that cross ventilation can be provided.

The extra rear entrance door is not necessary.

The front elevation would be greatly improved by eliminating the central column of porch.



# LONDON, "G1."

Owner, Wm. Bird. Architect, A. M. Piper, Plan No. 7. Frame, clapboard finish.

Cost, \$1,940.00. Loan, \$1,900.00.

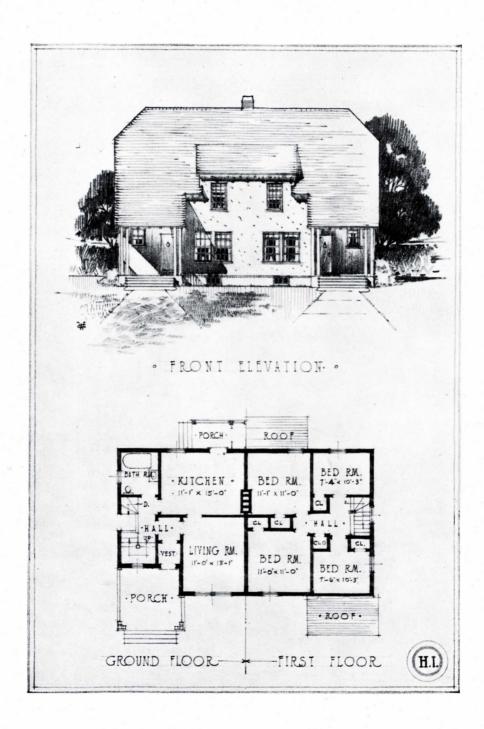
Comments by the Architectural Department.

### PLAN "G1."

A small one-storey bungalow containing four rooms and a bathroom. It is a fair example of the minimum size house.

A front vestibule should have been provided and a side window in bedroom No. 2 would improve ventilation.

A separate flue should have been provided for the kitchen in addition to the one for the furnace.



## HAWKESBURY, "H1."

Owners, Riordan Annex Housing Co., Limited. Architect, H. R. Dowsweil. Breeze concrete block, stucco finish.

Cost, \$4,189.00 for each house. Loan, 85 per cent. of cost.

Comments by the Architectural Department.

### PLAN "H1."

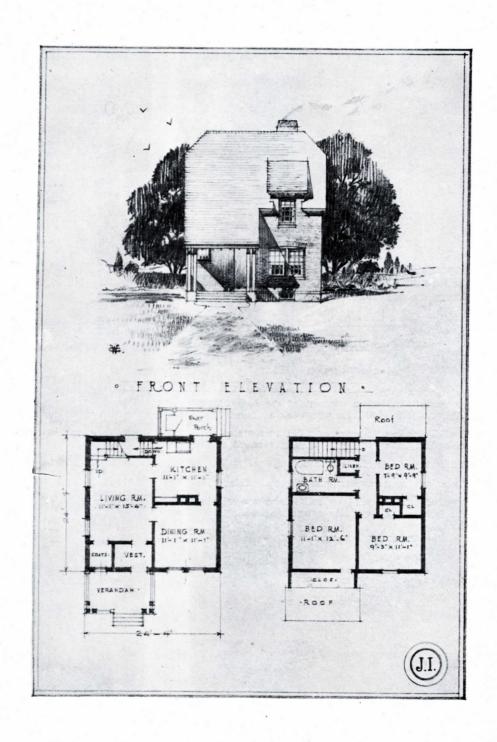
This shows a layout for semi-detached houses somewhat different from the usual plan for small houses on account of the bathroom being placed on the ground floor. This arrangement facilitates the working in of four bedrooms on the upper floor.

The kitchen has to serve as a dining room as well, or the living room can be made a combination living room and dining room if so desired.

Cross ventilation of the kitchen and two of the bedrooms cannot be obtained.

There are very unusual conditions in this case which make for high costs, but this type of house should be built elsewhere within the limits of the Act.

The houses are decidedly attractive looking and the plan merits study.



### HAWKESBURY, "J1."

Owners, Riordan Annex Housing Co. Architect, H. R. Dowswell. Solid brick.

Cost, \$4,198.00. Loan, 85 per cent. of cost.

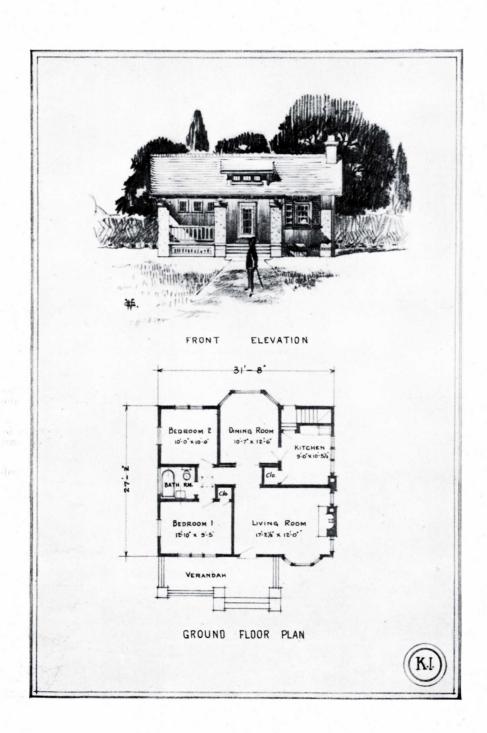
Comments by the Architectural Department.

PLAN "J1."

This plan is somewhat different from the common type of square house, as the main stairway is located at the back of the house with the grade entrance to the cellar and the kitchen under it.

The living-room located as shown, would mean that ample space would have to be left between the side wall and the adjoining house. The comments regarding cost of scheme "H1" also applies in this case.

A side window in the small front bedroom and a rear window in the rear bedroom could have been provided to give cross ventilation.



### HAMILTON, "K1."

Owner and Architect, Rufus Stone. Solid brick, pressed brick face.

Cost, \$3,800.00. Loan, \$3,800.00.

Comments by the Architectural Department.

### PLAN "K1."

The layout for this five-roomed bungalow allows good ventilation in all rooms except the kitchen. The stairs, however, leading from the kitchen could have been planned in another position so as to give cross ventilation in this room.

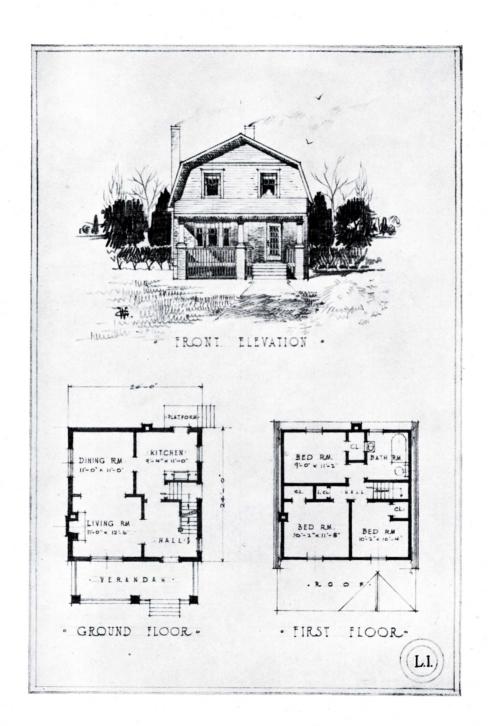
The rear entrance door serves as an outside entrance to the kitchen and to the cellar.

The relation between bedrooms and bathroom is good.

A front vestibule and coat space are absolutely necessary for comfort in a plan of this character.

Lack of closet accommodation throughout the house might be charged against the scheme.

The accompanying illustration of the plan and front elevation indicates that the walls of this house are of frame with stucco finish, but in this particular case it was finally decided to build the outer walls of solid brick.



# SAULT STE. MARIE, "L1."

Owner, R. Walker.

Architect, Thos. R. Wilks.

Brick veneer first storey, upper storey shingles on frame.

Cost \$3,000. Loan \$3,000.00.

Comments by the Architectural Department.

### PLAN " L1."

This is a typical six-roomed square plan type, but shows a great deal more hall space than is required on the ground floor.

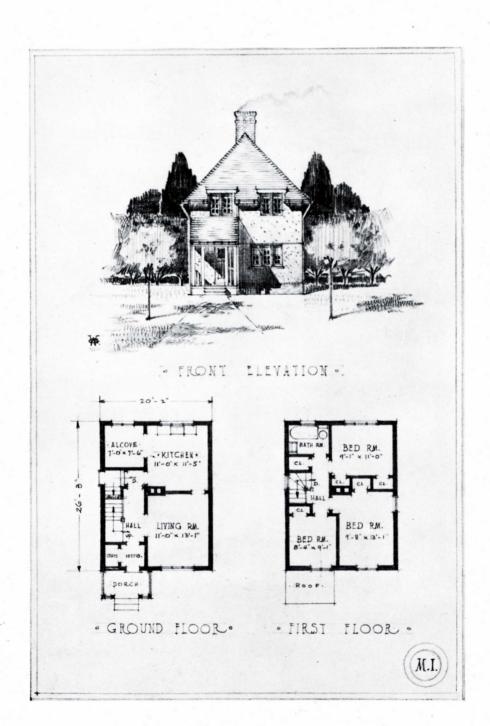
The necessary front vestibule and coat space has been omitted.

Duplication of rear entrance door unnecessary. An extra window should take the place of the rear door to give the necessary cross ventilation in the kitchen.

Small side windows in the upstair bedrooms should also be built in to give cross ventilation.

The position of adjacent buildings would determine the suitability of location of window to dining room in side wall only.

The unfortunate treatment of verandah supports should again be noted.



# NEW TORONTO, "M1."

New Toronto Housing Commission five-roomed detached type.

Engineers and Architects, James, Loudon & Hertzberg.

Hollow tile, stucco finish (other houses solid brick first storey; hollow tile, stucco finish second storey).

Cost. \$3,100.00.

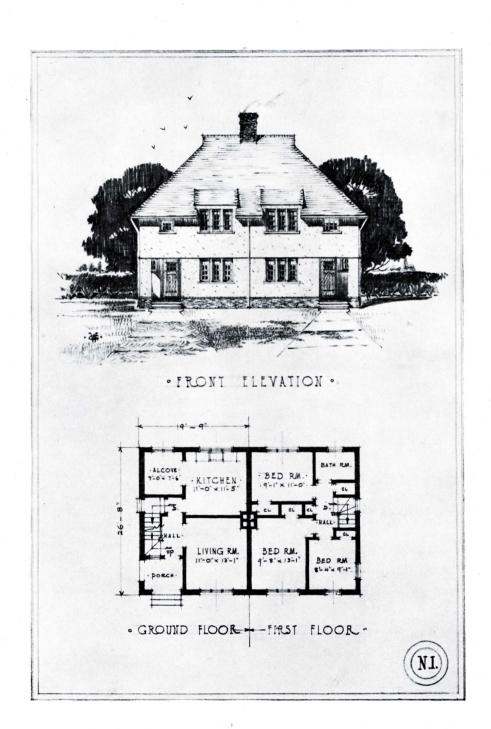
Comments by the Architectural Department.

PLAN "M1."

This type has a porch added to the front of the house and leaves room for the necessary vestibule and coat space.

The kitchen and the alcove replaces the usual dining room and kitchen respectively.

Small side windows to give cross ventilation in bedrooms and the kitchen would be an improvement.



### NEW TORONTO, "N1."

New Toronto Housing Commission five-roomed semi-detached type.

Engineers and Architects, James, Loudon & Hertzberg.

Hollow tile, stucco finish (other houses solid brick first storey; hollow tile, stucco finish second storey).

Cost of each house \$3,000.00.

Comments by the Architectural Department.

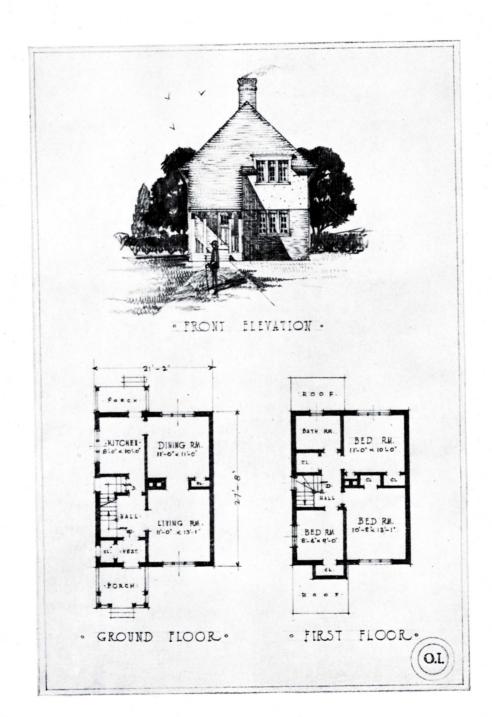
### PLAN " N.1."

These houses were built somewhat on the lines of a square planned house except that the kitchen and the alcove adjoining take the place of a dining room and kitchen respectively.

The plan of the kitchen in the position shown allows all the flues both from kitchens and from furnaces in each house to be carried up in one chimney stack at the centre of the building.

The front porch being worked into the plan as shown, cuts the area of the front hall down considerably and does not leave enough space to provide the necessary front vestibule and coat space.

The front porch would have to be glassed in for winter months if the vestibule protection is desired.



# NEW TORONTO, "01."

New Toronto Housing Commission.

Engineers and Architects, James, Loudon & Hertzberg.

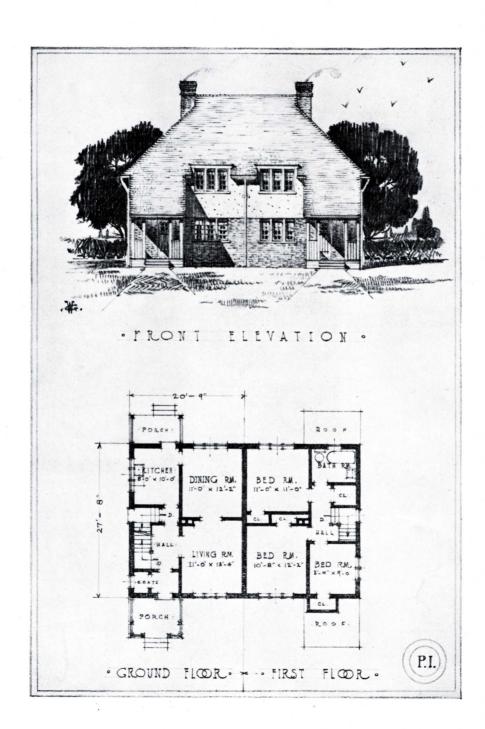
Solid brick first storey, hollow tile and stucco finish second storey.

Cost \$3,200.00.

Comments by the Architectural Department.

PLAN "01."

This is practically the same plan as "P1" except that it is detached.



### NEW TORONTO, "P1."

New Toronto Housing Commission six-roomed semi-detached type. Engineers and Architects, James, Loudon & Hertzberg. Solid brick first storey, hollow tile and stucco finish second storey.

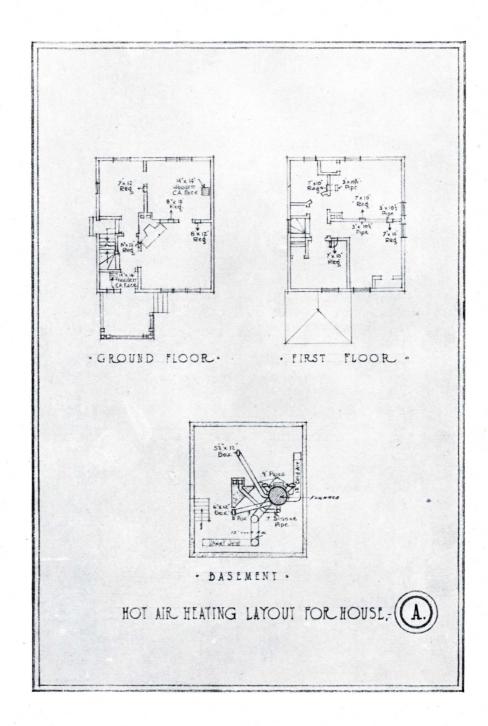
Cost of each house \$3,050.00.

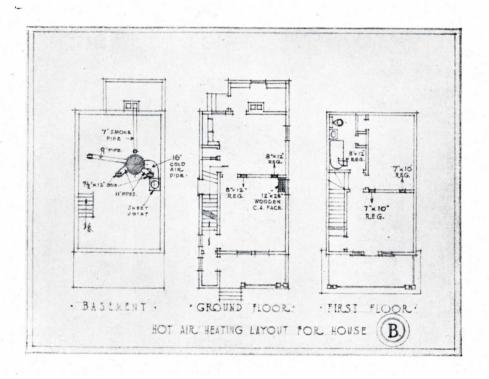
Comments by the Architectural Department.

## PLAN " P1."

This illustrates the typical six-roomed square planned type of house, and has the necessary front vestibule and coat space as well as the side grade entrance door giving access to the kitchen and to cellar from the outside.

If extra wall space is required in the kitchen for fittings, the rear door and porch could be omitted.







Houses Now Being Built by the New Toronto Housing Commission.

View looking south at west side of Eighth St.

James, Loudon & Hertzberg, Engineers and Architects.

The three old houses shown in this view were not built by the Commission and are indicated on the following Block Plan of this Development by dotted lines.



HOUSES NOW BEING BUILT BY THE NEW TORONTO HOUSING COMMISSION. View looking south at the east side of Eighth St. James, Loudon & Hertzberg, Engineers and Architects.

The seventh house down this side was not built by the Commission and is indicated on the following Block Plan of this Development by dotted lines. Some variation in roof outlines and use of building materials would have improved this as a street development.



Houses Now Being Built by the New Toronto Housing Commission.

A close-up view of some of the houses in course of erection on the west side of Eighth St.

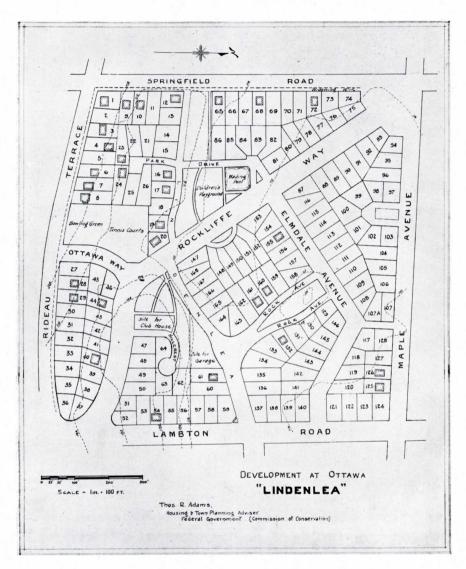
James, Loudon & Hertzberg, Engineers and Architects.

This illustration emphasizes the need for variety in roof outlines and use of materials.

R.H.

The above development illustrates the result of study in adapting the requirements of a housing project to property already subdivided and partially built upon in a municipality where land values are very high.

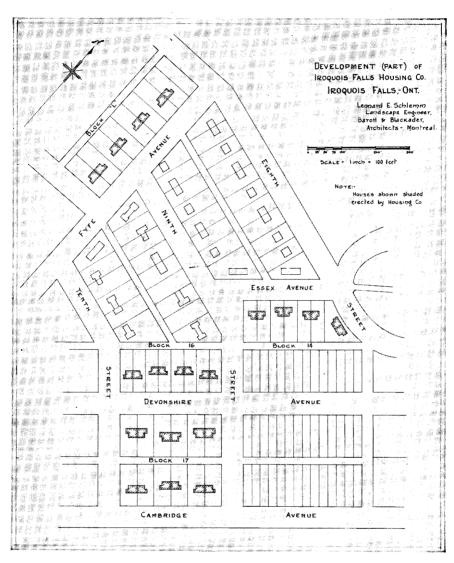
Varying the distance of groups of houses from the street line of a straight street, together with changes in types of adjacent houses will overcome the monotonous appearance so often noticeable in city residential streets.



LINDENLEA, OTTAWA.

The location of streets and open space on this Development was influenced largely by the necessity of preserving the natural beauty of the site, such as fine trees and rock outcroppings, which are retained as open spaces.

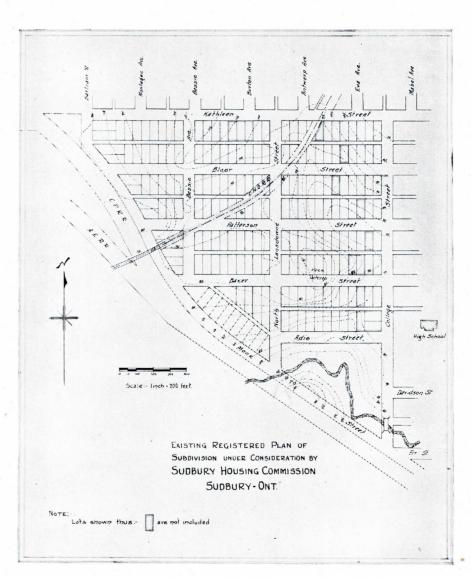
Owing to the fact that practically one-third of the area was dedicated as either streets or open spaces, Elmdale and the easterly end of Lindenlea Avenue were approved with dedication of only fifty feet for street purposes, provided the houses were at least sixty-six feet apart across the street.



IROQUOIS FALLS.

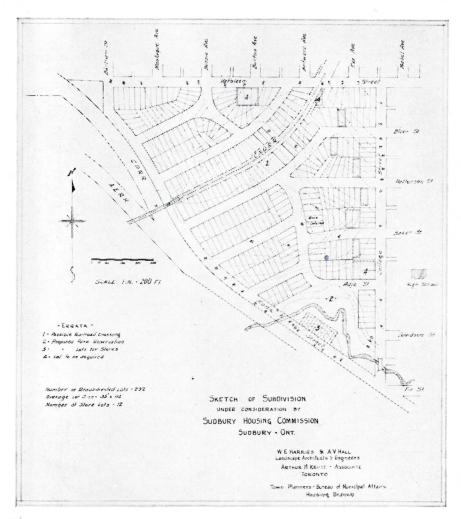
This development was a part of a Townsite Plan where the extremely low cost of the land allowed for the provision of lanes, upon which the public utilities were generally placed and for generous sized lots.

Areas for parks and open spaces were amply provided for outside of portion of plan shown above.



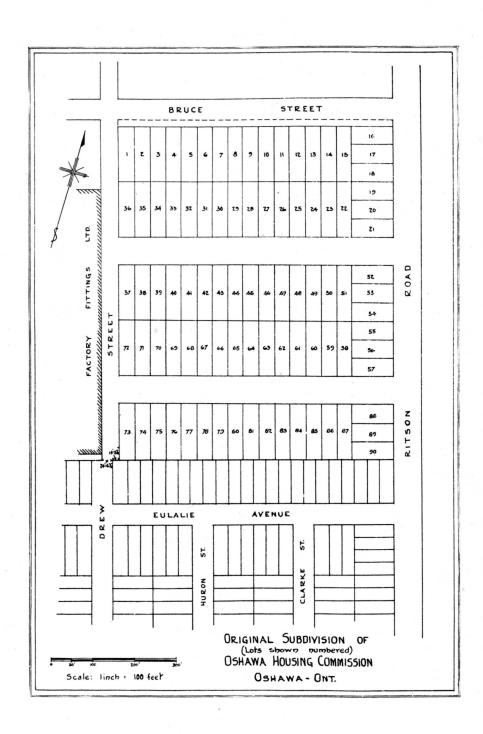
ORIGINAL PLAN, SUDBURY.

Above plan shows no consideration for existing grades, rock outcroppings, railway crossings, or economic shape of lots, created by special features such as railways, rivers, etc. It also includes twenty-foot lanes which are not desirable or necessary in housing developments.



REVISED PLAN, SUDBURY.

This plan shows the location of streets and lots after giving consideration to the defects in the original gridinon plan illustrated.



### ORIGINAL SUBDIVISION SUBMITTED BY OSHAWA HOUSING COMMISSION.

Original plan submitted for approval of Railway Board and Housing Branch of Bureau of Municipal Affairs.

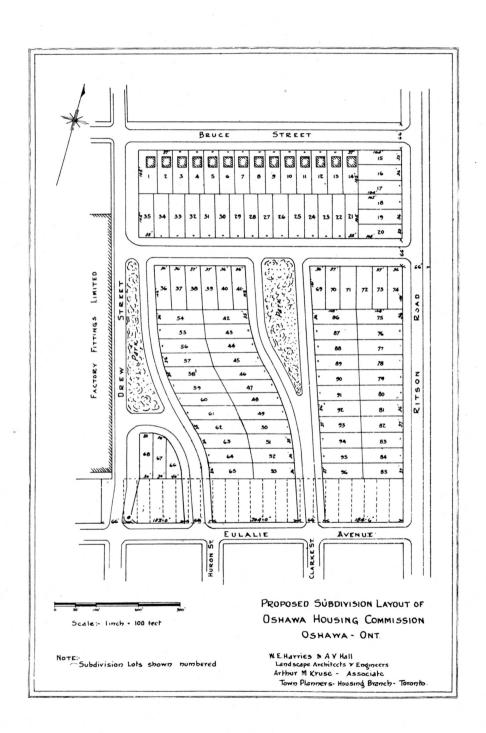
Objection was taken to the thoroughfare, Drew Street, being only 40 feet in width with two streets 66 feet wide opening into it, in addition to the fact that for practically the whole length of the property the wall of a factory had been built on the property line, thus preventing possibility of a future widening on that side.

North of Bruce Street this thoroughfare, although dedicated 41 feet in width, was entirely built upon with houses located far enough back so that there is 75 feet between verandahs.

Drew Street as shown on this plan connected with its production on a registered subdivision to the south in such a way that it allowed only 26 feet of street width at the boundary line between this and the adjoining property.

Very little of the above information was evident on the plan of subdivision submitted for approval as it did not show the condition existing beyond the property boundaries.

This plan provided for 90 lots and had approval been given to it, subject to the widening of Drew Street to 66 feet, practically 5 entire lots would have had to be sacrificed, thus leaving space for 85 houses. One lot in the adjoining subdivision would have had to be purchased for the extension of Drew Street.



# PROPOSED SUBDIVISION FOR OSHAWA HOUSING COMMISSION.

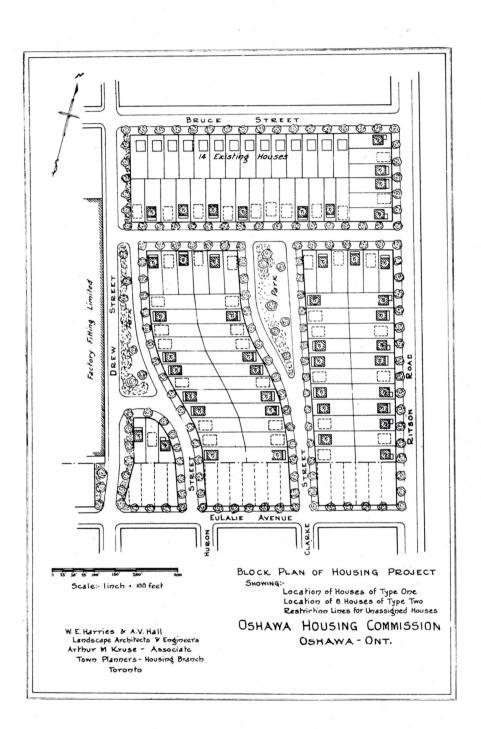
This plan shows the Department's suggestions for overcoming objections described under Plan No. 1.

In addition to meeting the difficulties outlined it provides:-

1st, better traffic connection with Huron and Clarke Streets in the adjoining subdivision.

2nd, open spaces, one of which screens the factory wall on Drew Street.

3rd, 96 lots, and requires the purchase of 7 lots in the adjoining subdivision to allow for street extensions.



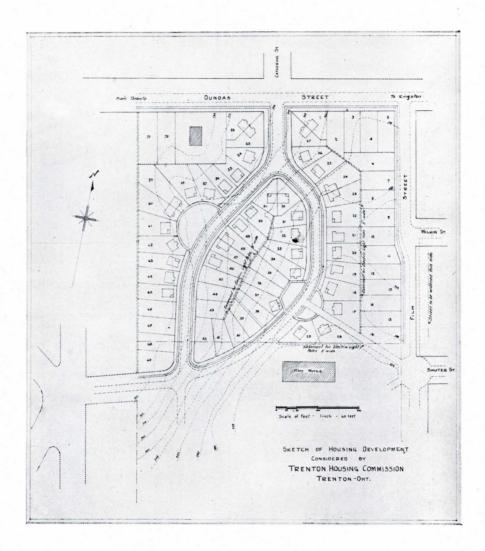
### BLOCK PLAN OF HOUSING PROJECT FOR OSHAWA HOUSING COMMISSION.

This plan shows the location of 36 houses of the same type, 30 of which will be erected as the balance of an incomplete contract.

It also allocates 7 houses of a second type which has been approved and for which contracts are being let.

It determines the front line of houses or porches upon 40 lots on which different types of houses may be erected.

Corner houses have been kept back to allow the maximum view across the intersections of streets, and setbacks in frontages have been provided to counteract the effect of continuous street lines noticeable in the existing houses on Bruce Street.



W. L. Somerville, Architect.

While the scheme above illustrated has not been carried out, it shows very clearly how a site over which there is considerable difference in elevation can be arranged for housing by adapting the road lines to the counter levels. The excavations from the cellars of houses located on higher ground are often sufficient to complete the fill required in low portions.

This layout also provides for access to the large City Park and to a traffic centre in the adjoining subdivision.



D. S. P. No. 1.

Houses built by Dominion Steel Products Co., at Brantford, Ontario (not under Housing Act). Hollow tile construction. Messrs. Scott & Wardell, Architects.

This cut shows some excellent individual houses built before the enactment of the Housing Act, which are of more expensive type than could now be included.

Comparing this illustration with D.S.P. No. 2 following although the houses are equally attractive, the slight difference in design does not provide as good variation in roof lines and general effect.



D. S. P. No. 2.

Houses built by Dominion Steel Products Co., at Brantford, Ontario (not under Housing Act). Hollow tile construction. Messrs. Scott & Wardell, Architects.

This illustrates the effectiveness of a setback in line of fronts of groups of houses on a straight street, combined with a change in type, even where several houses adjacent to each other are of the same type.

These houses are of a more expensive type than could be built under the Act.



D. S. P. No. 3.

Houses built by Dominion Steel Products Co., at Brantford, Ontario (not under Housing Act). Hollow tile construction. Messrs. Scott & Wardell, Architects.

The above illustration shows an admirable grouping of semi-detached houses and provision for play area and open space which is adaptable to projects where the land values are moderate.

Such an arrangement demands that the Company or Commission definitely provide for the ownership and the maintenance of the common area for the life period of the houses,

# INDEX

Reports of:—	PAGE
Director	1
Chief Architect	
Town Planners	30
Sanitary Engineer	36
Municipalities under Housing Act, operations of:-	
Acton	9,11
Arthur	8
Barton Township	10, 11
Beaverton	
Belleville	8, 11
Brampton	8, 11
Brantford	8, 11
Brantford Township	10, 12
Bridgeburg	
Brockville	
Burlington	
Carleton Place	0
Chapleau Township	
Capreol	0 10
Chatham	,
Chippawa	
Cobourg	
	0 10
Cochrane Elmira	
Englehart	10, 13
Etobicoke Township	-,
Fergus	
Ford City	, ,
Fort Frances	
Fort William	
Galt	
Georgetown	
Gloucester Township	
Goderich	
Gravenhurst	
Guelph	
Guelph Township	
Haileybury	
Hamilton	
Hawkesbury	
Hensall	
Hespeler	
Humberstone	9,15
Ingersoll	
Iroquois Falls	8, 16
Kitchener	8, 16
Leamington	8, 16
Leaside	
Listowel	
London	
Madoc	
Merritton	
Midland	
Milton	
Milverton	,
Mimico	
MILLIO	0, 11

		PAGE
	Neebing Township	10
	New Toronto	9.17
	Niagara Town	9
	Niagara Falls	8, 18
	North Bay	9
	Ottawa	8, 18
	Oshawa	9, 18
	Owen Sound	9, 18
		9
	Palmerston	
	Paris	9, 19
	Perth	9, 19
	Pickering Township	10
	Point Edward	9, 19
	Port Arthur	8, 19
	Port Colborne	9, 19
	Port Credit	9, 20
	Port Dalhousie	9, 20
	Port McNicoll	9, 20
	Renfrew	9, 20
	Richmond Hill	9, 20
	Sandwich	9, 20
	Sandwich East Township	,
	Sarnia	8, 21
	Sault Ste. Marie	8, 21
	Scarborough Township	10
	St. Catharines	8, 21
		,
	Sioux Lookout	
	Smith's Falls	9, 22
	Stamford Township	10, 22
	Stratford	8, 22
	Sturgeon Falls	9, 22
	Sudbury	
	Tara	9,23
	Thorold	
	Thorold Township	10
	Timmins	9, 23
	Trenton	9, 23
	Uxbridge	9
	Victoria Harbour	9
	Walkerville	9, 23
	Waterloo	9, 24
	Welland	8, 24
	West Oxford Township	10
	• 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	Windsor	
	Woodbridge	
	Woodstock	
	York Township	10, 25
Pla	ns:—	
	Department's stock, Design "A," and architect's comments thereon	38
	Hot air heating layout for Plan "A"	
	Department's stock, Design "B," and architect's comments thereon	40
	Hot air heating layout for Plan "B"	119
Pla	ns and architect's comments thereon of houses erected at:-	
	Brantford	46
	Brantford Township	42
	Hamilton	88
	"	106
	Hawkesbury	102
	"	104
	Ingersoll	76
	Leamington	78
	London	100
	Merritton	70
	" " "	98
		00

	PAGE
Midland	86
Midland	
New Toronto	
" "	
Niagara Falls	
Oshawa	
"	62
Ottawa	64
"	
*	
Port Arthur	
Port Credit	
Sandwich East Township	
Sault Ste. Marie	0.0
" " "	
"    "	
	. 80
	. 108
Sudbury	. 84
St. Catharines	
Windsor	
"	
Woodstock	0.0
Woodstock	02
Plans of houses not special and architect's comments thousen.	
Plans of houses not erected and architect's comments thereon:—	. 60
M	
В 1	. 90
Groups of houses and comments thereon at:-	
Brantford	. 135
<b>"</b>	. 136
"	. 137
New Toronto	. 120
" "	404
" "	
	. 122
Plans of Developments and Town Planner's comments thereon at:-	
	10-
Iroquois Falls	
New Toronto	
Oshawa	
<b>"</b>	
"	. 132
Ottawa	. 124
Sudbury	400
"	
Thomton	124